

August 27, 2003

State of Utah
Division of Oil, Gas & Mining
Attn: Diana Mason
1594 West North Temple - Suite 1210
P.O. Box 145801
Salt Lake City, Utah 84114-5801

RE: Applications for Permit to Drill: Federal 1-11-9-17, 5-11-9-17, 7-11-9-17, 9-11-9-17, 11-11-9-17, and 15-11-9-17.

#### Dear Diana:

Enclosed find APD's on the above referenced wells. If you have any questions, feel free to give either Brad or myself a call.

Sincerely,

Mandie Crozier

Regulatory Specialist

mc

enclosures

RECEIVED

AUG 2 8 2003

DIV. OF OIL, GAS & MINING

Form 3160-3 (September 2001)  UNITED STATES			FORM APPRO OMB No. 1004 Expires January	4-0136	
DEPARTMENT OF THE IN			5. Lease Serial No.		
BUREAU OF LAND MANAG			U-075174		
			6. If Indian, Allottee or T	ribe Name	
0 1 APPLICATION FOR PERMIT TO DE	CILL OR REENTER		N/A		
la. Type of Work: DRILL REENTER			7. If Unit or CA Agreemen	nt, Name and No.	
_			8. Lease Name and Well N	Jo.	
1b. Type of Well: ☐ Oil Well ☐ Gas Well ☐ Other	Single Zone 🔲 Multi	ple Zone	Federal 9-11-9-17		
Name of Operator     Inland Production Company			9. API Well No. 43-047-35	158	
3a. Address	3b. Phone No. (include area code)		10. Field and Pool, or Explo		
Route #3 Box 3630, Myton UT 84052	(435) 646-3721 <sup>-</sup>	•	Monument Butte	Egnr muu N	
4. Location of Well (Report location clearly and in accordance with At surface NE/SE 2038' FSL 720' FEL 4432914	any State requirements.*) Y 40 04376		11. Sec., T., R., M., or Blk.	and Survey or Area	
			NE/SE Sec. 11, TS	9S R17E	
14. Distance in miles and direction from nearest town or post office*			12. County or Parish	13. State	
Approximatley 16.1 miles southeast of Myton, Utah			Uintah	UT	
<ol> <li>Distance from proposed*         location to nearest property or lease line, ft.     </li> </ol>	16. No. of Acres in lease	l7. Spacin	g Unit dedicated to this well	•	
(Also to nearest drig. unit line, if any) Approx. 602' t/lse, NA t/unit	720.00		40 Acres		
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.  Approx. 2443'	19. Proposed Depth 6500'		BIA Bond No. on file		
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will sta				
5081' GR	4th Quarter 2003	n-	23. Estimated duration  Approximately seven (7) days from spud to rig release.		
	24. Attachments			100	
The following, completed in accordance with the requirements of Onshor	re Oil and Gas Order No.1, shall be att	ached to this	s form:		
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest System SUPO shall be filed with the appropriate Forest Service Office).</li> </ol>	I tem 20 above).  5. Operator certific	ation. specific infe	ns unless covered by an exist	· ·	
25. Signature	Name (Printed/Typed)		Date	_ /_	
Manche Crozies	Mandie Crozier		1 1	<u>8/27/03</u>	
Title Regulatory Specialist County	Sar4		l l		
Approved by (Signature)	Name (Printed/Typed)		Date T	6-04-03	
Approved by (Signature)  Title Regulatory Specialist  Fertal Institutes	Offi ENVIRONMENTA	<mark>' G. HI</mark> LSCIENT	LL. TIST III	<u> </u>	
Application approval does not warrant or certify the the applicant holds le operations thereon.  Conditions of approval, if any, are attached.	gal or equitable title to those rights in			applicant to conduct	
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it States any false, fictitious or fraudulent statements or representations as to	a crime for any person knowingly an	d willfully t	o make to any department or	agency of the United	

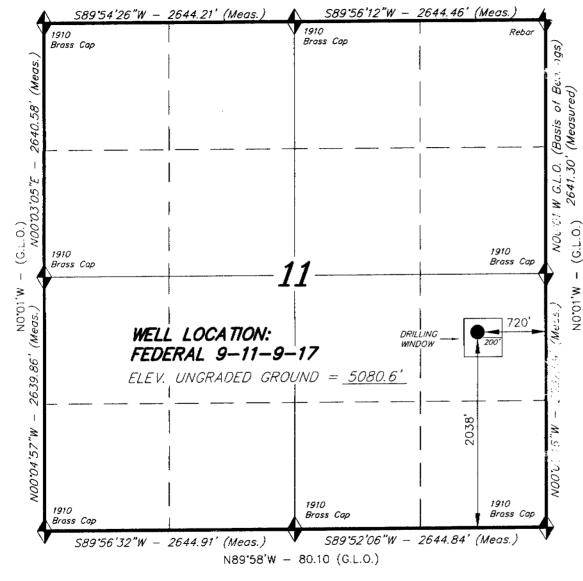
\*(Instructions on reverse)

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### T9S, R17E, S.L.B.&M.

N89'59'W - 80.06 (G.L.O.)



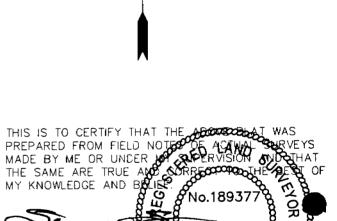
4

= SECTION CORNERS LOCATED

BASIS OF ELEV; U.S.G.S. 7-1/2 min QUAD (PARIETTE DRAW SW)

#### INLAND PRODUCTION COMPANY

WELL LOCATION, FEDERAL 9-11-9-17, LOCATED AS SHOWN IN THE NE 1/4 SE 1/4 OF SECTION 11, T9S, R17E, S.L.B.&M. UINTAH COUNTY, UTAH.



### TRI STATE LAND SURVEYING CONSULTING

38 WEST 100 NORTH - VERNAL, UTAH 84078 (435) 781-2501

 SCALE: 1" = 1000'
 SURVEYED BY: K.G.S.

 DATE: 7-10-03
 DRAWN BY: R.V.C.

 NOTES:
 FILE #

#### INLAND PRODUCTION COMPANY FEDERAL #9-11-9-17 NE/SE SECTION 11, T9S, R17E UINTAH COUNTY, UTAH

#### ONSHORE ORDER NO. 1

#### **DRILLING PROGRAM**

#### 1. <u>GEOLOGIC SURFACE FORMATION:</u>

Uinta formation of Upper Eocene Age

#### 2. <u>ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:</u>

Uinta 0' - 1640' Green River 1640' Wasatch 5830'

#### 3. <u>ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERALS:</u>

Green River Formation 1640' - 6500' - Oil

#### 4. PROPOSED CASING PROGRAM

Please refer to the Monument Butte Field Standard Operation Procedure (SOP).

#### 5. <u>MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:</u>

Please refer to the Monument Butte Field SOP. See Exhibit "C".

#### 6. TYPE AND CHARACTERISTICS OF THE PROPOSED CIRCULATION MUDS:

Please refer to the Monument Butte Field SOP.

#### 7. AUXILIARY SAFETY EOUIPMENT TO BE USED:

Please refer to the Monument Butte Field SOP.

#### 8. <u>TESTING, LOGGING AND CORING PROGRAMS:</u>

Please refer to the Monument Butte Field SOP.

#### 9. ANTICIPATED ABNORMAL PRESSURE OR TEMPERATURE:

The anticipated maximum bottom hole pressure is 2000 psi. It is not anticipated that abnormal temperatures will be encountered.

#### 10. ANTICIPATED STARTING DATE AND DURATION OF THE OPERATIONS:

Please refer to the Monument Butte Field SOP.

#### INLAND PRODUCTION COMPANY FEDERAL #9-11-9-17 NE/SE SECTION 11, T9S, R17E UINTAH COUNTY, UTAH

#### ONSHORE ORDER NO. 1

#### MULTI-POINT SURFACE USE & OPERATIONS PLAN

#### I. EXISTING ROADS

See attached Topographic Map "A"

To reach Inland Production Company well location site Federal #9-11-9-17 located in the NE 1/4 SE 1/4 Section 11, T9S, R17E, Uintah County, Utah:

Proceed southwesterly out of Myton, Utah along Highway 40 - 1.6 miles  $\pm$  to the junction of this highway and UT State Hwy 53; proceed southeasterly along Hwy 53 - 10.0 miles  $\pm$  to it's junction with an existing road to the southeast; proceed southeasterly -2.7 miles  $\pm$  to it's junction with the beginning of the proposed access road; proceed northwesterly along the proposed access road 135'  $\pm$  to the proposed well location.

#### 2. PLANNED ACCESS ROAD

See Topographic Map "B" for the location of the proposed access road.

#### 3. LOCATION OF EXISTING WELLS

Refer to Exhibit "B".

#### 4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

Please refer to the Monument Butte Field Standard Operating Procedure (SOP).

#### 5. LOCATION AND TYPE OF WATER SUPPLY

Please refer to the Monument Butte Field SOP. See Exhibit "A".

#### 6. SOURCE OF CONSTRUCTION MATERIALS

Please refer to the Monument Butte Field SOP.

#### 7. <u>METHODS FOR HANDLING WASTE DISPOSAL</u>

Please refer to the Monument Butte Field SOP.

#### 8. ANCILLARY FACILITIES

Please refer to the Monument Butte Field SOP.

#### 9. WELL SITE LAYOUT

See attached Location Layout Diagram.

#### 10. PLANS FOR RESTORATION OF SURFACE

Please refer to the Monument Butte Field SOP.

#### 11. SURFACE OWNERSHIP - Bureau Of Land Management

#### 12. <u>OTHER ADD</u>ITIONAL INFORMATION

The Archaeological Resource Survey for this area will be forthcoming. The Paleontological Resource Survey is attached. Paleontological Resource Survey prepared by, Wade E. Miller, 5/8/03. See attached report cover pages, Exhibit "D".

Inland Production Company requests a 60' ROW for the Federal #9-11-9-17 to allow for construction of a 6" gas gathering line, and a 3" poly fuel gas line. Both lines will tie in to the existing pipeline infrastructure. **Refer to Topographic Map "C."** For a ROW plan of development, please refer to the Monument Butte Field SOP.

Inland Production Company also requests a 60' ROW be granted for the Federal #9-11-9-17 to allow for construction of a 3" steel water injection line and a 3" poly water return line. **Refer to Topographic Map "C."** For a ROW plan of development, please refer to the Monument Butte Field SOP.

#### Water Disposal

Please refer to the Monument Butte Field SOP.

#### Reserve Pit Liner

A 12 mil liner is required. Please refer to the Monument Butte Field SOP.

#### **Location and Reserve Pit Reclamation**

Please refer to the Monument Butte Field SOP.

The following seed mixture will be used on the topsoil stockpile, the recontoured surface of the reserve pit, and for final reclamation: (All poundages are in pure live seed)

Indian Ricegrass

Oryzopsis Hymenoides

4 lbs/acre

Four-wing Saltbush

Atriplex Canescens

4 lbs/acre

Shadscale

Atriplex Centertifolia

4 lbs/acre

#### 13. <u>LESSEE'S OR OPERATORS REPRESENTATIVE AND CERTIFICATION</u>

#### Representative

Name:

Brad Mecham

Address:

Route #3 Box 3630

Myton, UT 84052

Telephone:

(435) 646-3721

#### **Certification**

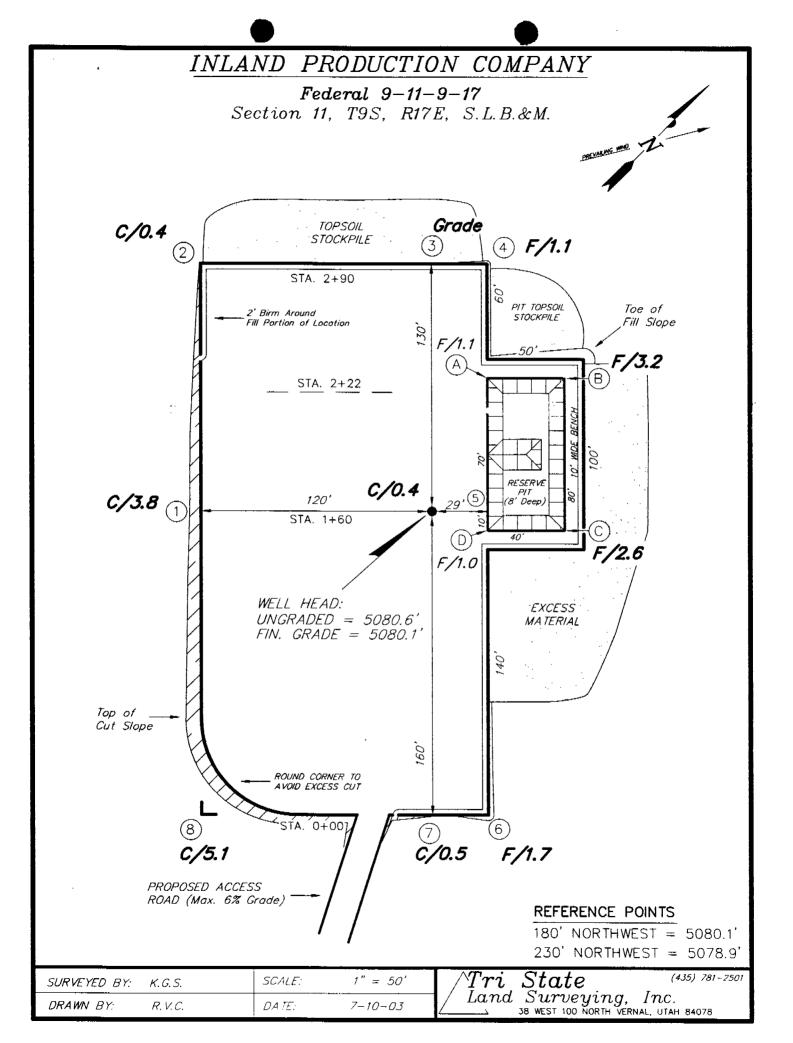
Please be advised that INLAND PRODUCTION COMPANY is considered to be the operator of well #9-11-9-17 NE/SE Section 11, Township 9S, Range 17E: Lease U-075174 Uintah County, Utah: and is responsible under the terms and conditions of the lease for the operations conducted upon the leased lands. Bond coverage is provided by Hartford Accident #4488944.

I hereby certify that the proposed drillsite and access route have been inspected, and I am familiar with the conditions which currently exist; that the statements made in this plan are true and correct to the best of my knowledge; and that the work associated with the operations proposed here will be performed by Inland Production Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

Date

Date

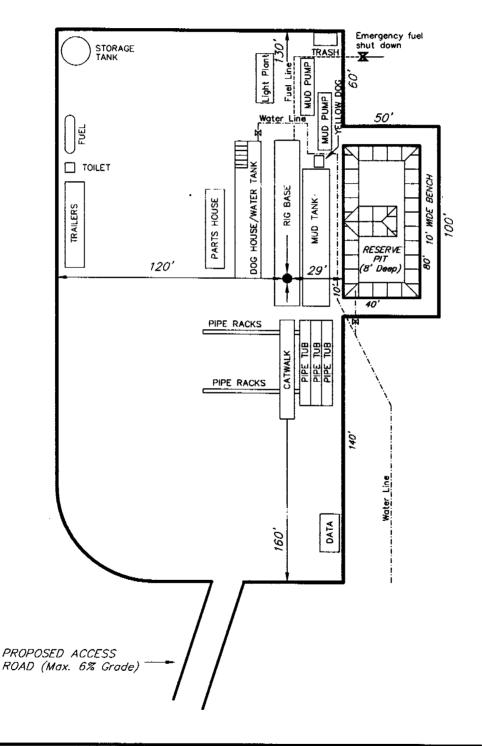
Mandie Crozier Regulatory Specialist



#### INLAND PRODUCTION COMPANY CROSS SECTIONS Federal 9-11-9-17 20, П STA. 2+90 1" = 50'20, 1" = 50'STA. 2+22 **EXISTING** FINISHED GRADE GRADE WELL HOLE 20, 1'' = 50'STA. 1+60 20 Н 1'' = 50'STA. 0+00 ESTIMATED EARTHWORK QUANTITIES (Expressed in Cubic Yards) ITEM CUT FILL 6" TOPSOIL **EXCESS** Topsoil is not included PAD 2,300 640 1,660 UNLESS OTHERWISE NOTED PIT 640 in Pad Cut 640 ALL CUT/FILL SLOPES ARE **TOTALS** 2,940 640 890 2,300 AT 1.5:1 Tri State Land Surveying, Inc. 38 WEST 100 NORTH VERNAL, UTAH 84078 (435) 781-2501 1" = 50' SCALE: SURVEYED BY: K.G.S. DRAWN BY: R. V. C. DATE: 7-10-03

## INLAND PRODUCTION COMPANY

## TYPICAL RIG LAYOUT Federal 9-11-9-17

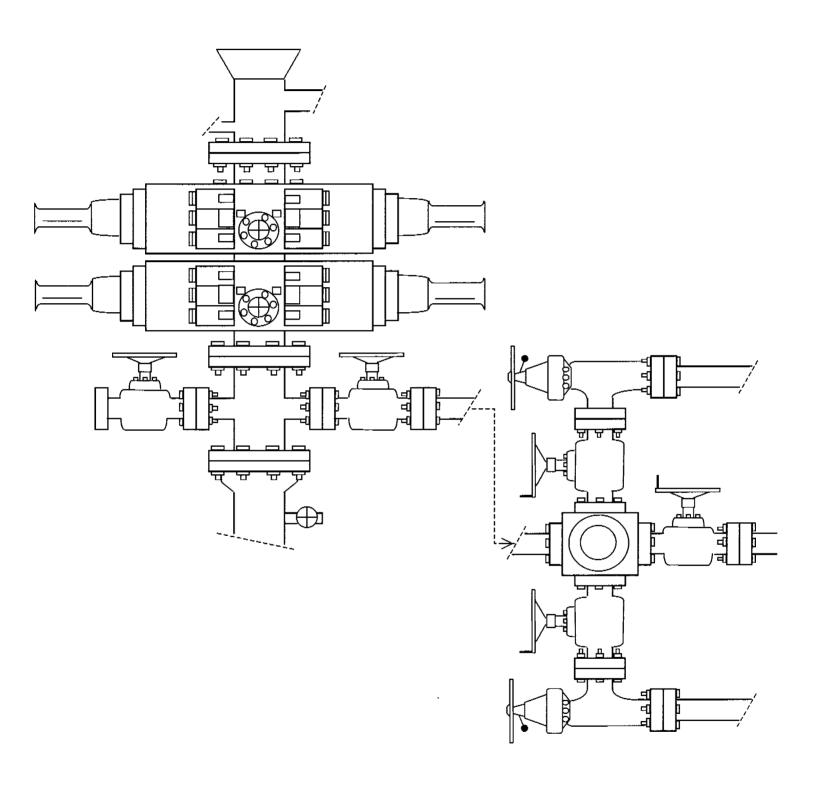


(435) 781-2501

SURVEYED BY:	K.G.S.	SCALE:	1" = 50'	/Tri $State$ (435) 781-
DRAWN BY:	R. V. C.	DATE:	7-10-03	Land Surveying, Inc. 38 WEST 100 NORTH VERNAL, UTAH 84078

2-M SYSTEM

**Blowout Prevention Equipment Systems** 



**EXHIBIT C** 

#### INLAND RESOURCES, INC.

# PALEONTOLOGICAL FIELD SURVEY OF PROPOSED PRODUCTION DEVELOPMENT AREAS, DUCHESNE AND UINTAH COUNTIES, UTAH

(South ½ Section 6, T 9 S, R 18 E; South ½ Section 1, T 9 S, 17 R E; all of Sections 11 and 12, the NW, SE & NE quarters of the SW 1/4 Section 10, the NE1/4 & SE 1/4 of the SE 1/4 Section 9, T 9 S, R 17 E and the SE 1/4, SW 1/4, NE 1/4 and SE 1/4 of the SE 1/4, Section 33, T 8 S, R 17 E.)

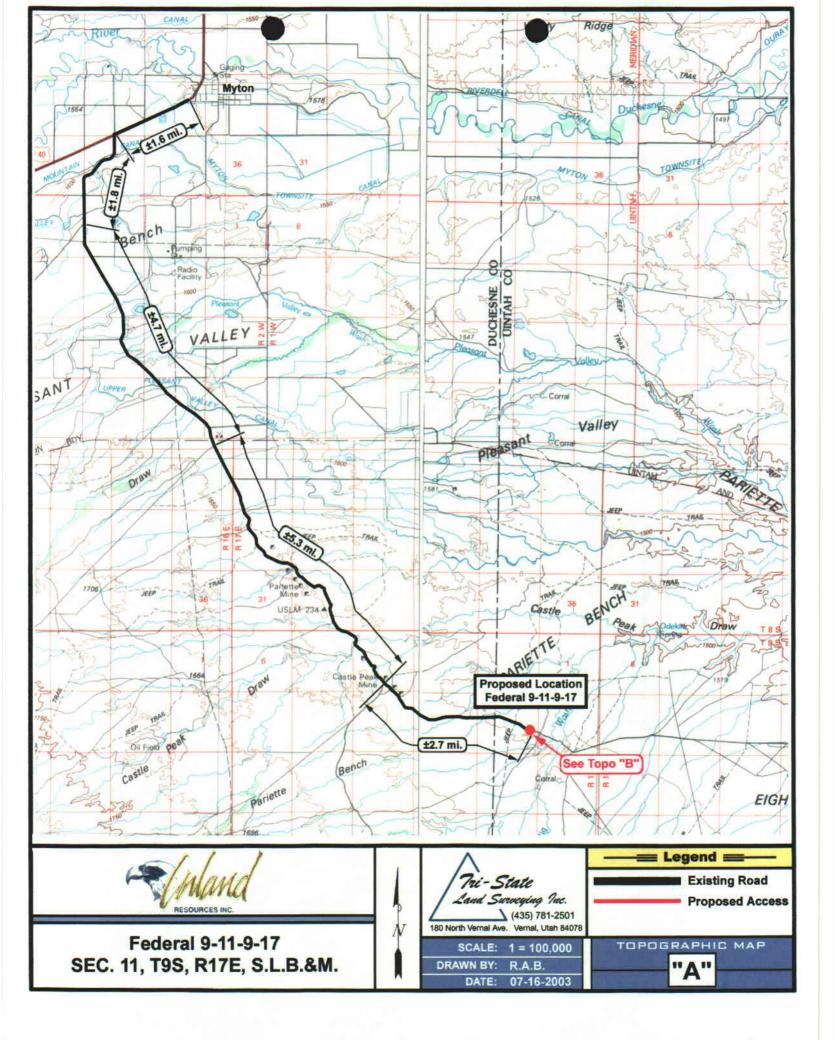
#### REPORT OF SURVEY

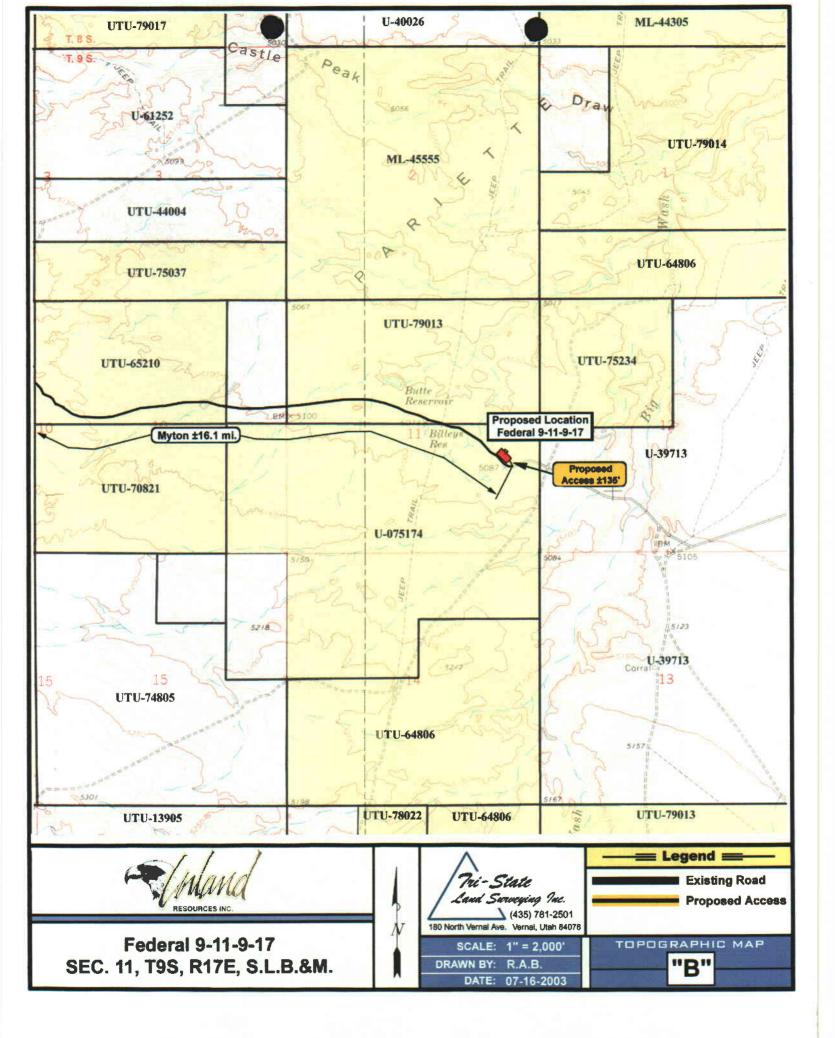
Prepared for:

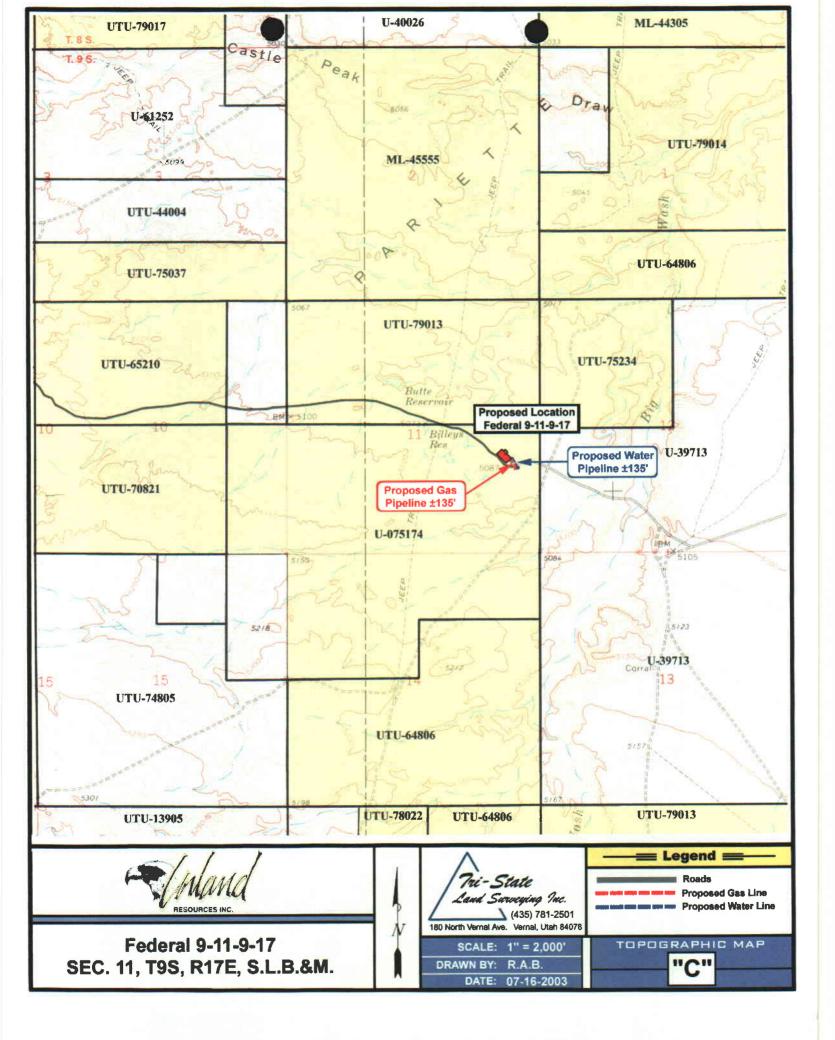
Inland Resources, Inc.

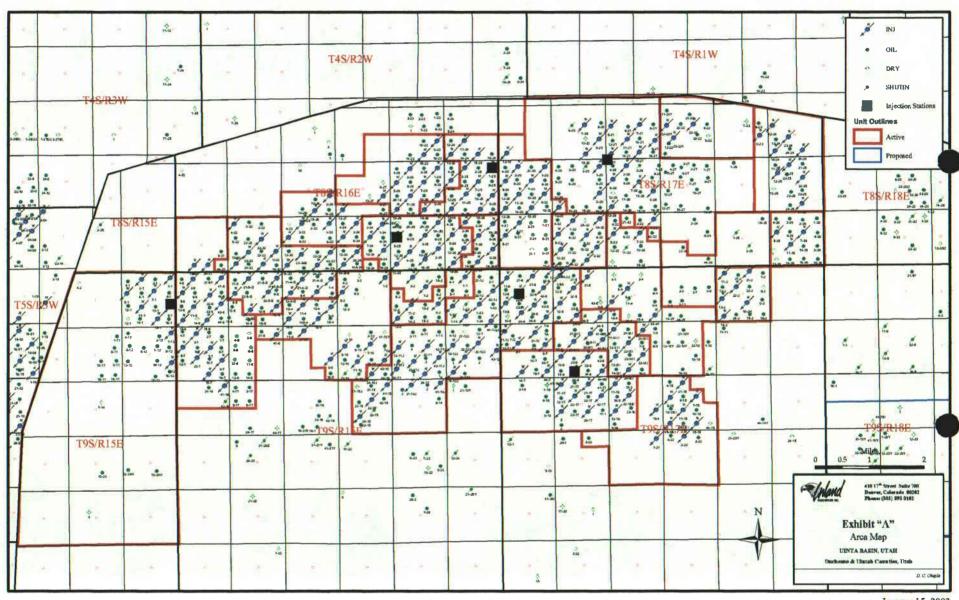
Prepared by:

Wade E. Miller Consulting Paleontologist May 8, 2003

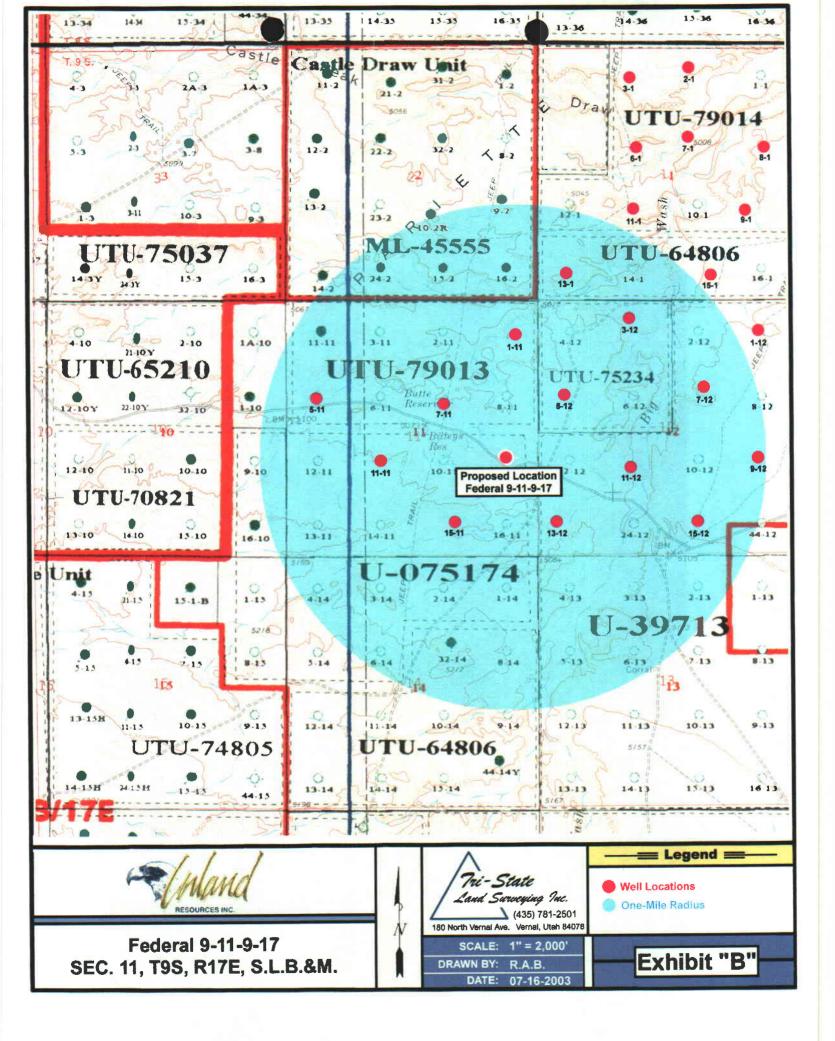








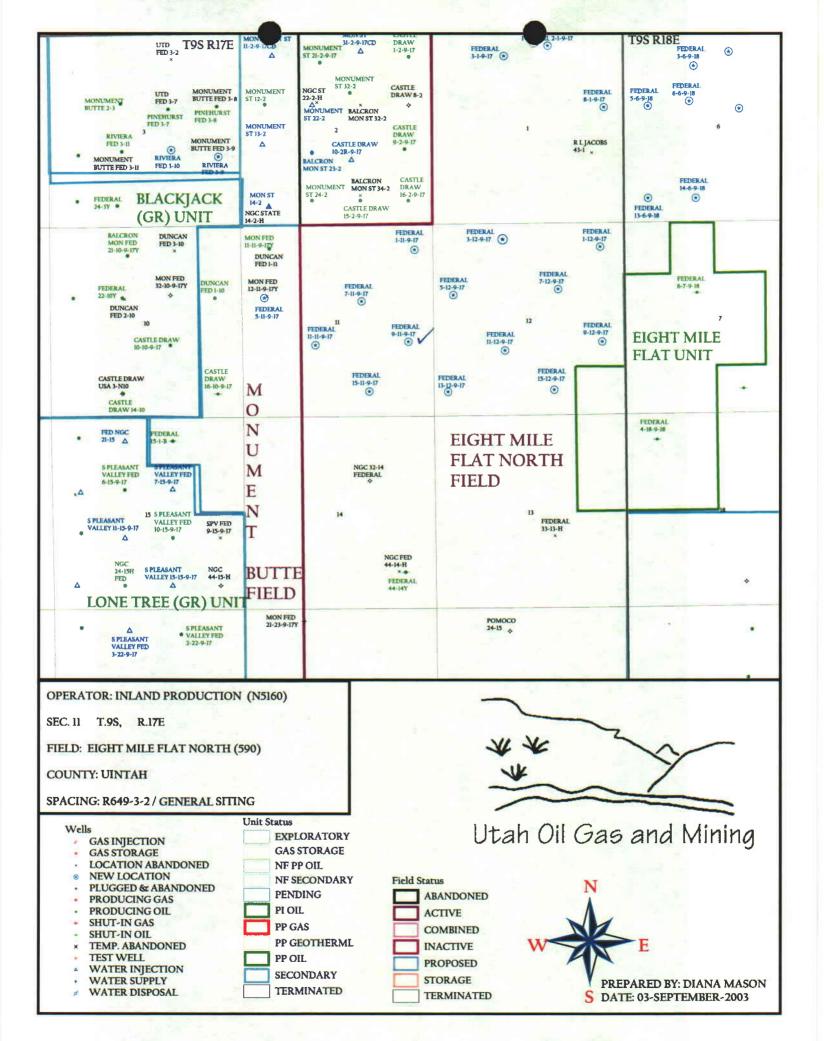
January 15, 2003



### WORKS APPLICATION FOR

HEET		
PERMIT	то	DRILL

APD RECEIVE	ED: 08/28/2003	API NO. ASSIGNED: 43-047-35158			
OPERATOR:	FEDERAL 9-11-9-17 INLAND PRODUCTION ( N5160 ) MANDIE CROZIER	PHONE NUMBER: 4	35-646-3721		
BOTTOM: UINTAH 8 MILE LEASE TYPE	DCATION:  11 090S 170E : 2038 FSL 0720 FEL  2038 FSL 0720 FEL  FLAT NORTH ( 590 ) : 1 - Federal ER: U-075174	INSPECT LOCATN  Tech Review  Engineering  Geology  Surface	BY: / / Initials	Date	
	NER: 1 - Federal  DRMATION: GRRV	LATITUDE: 40.0 LONGITUDE: 109.			
Plat Bond (No. N Potas N Oil S Water (No. RDCC (Date	Shale 190-5 (B) or 190-3 or 190-13	R649-3-3. I Drilling Uni Board Cause Eff Date: Siting:	General rom Qtr/Qtr & 920' Exception	Between Wells	
COMMENTS: _					



004



Michael O. Leavitt Governor Robert L. Morgan Executive Director Lowell P. Braxton Division Director 1594 West North Temple, Suite 1210 PO Box 145801 Salt Lake City, Utah 84114-5801 (801) 538-5340 telephone (801) 359-3940 fax (801) 538-7223 TTY www.nr.utah.gov

September 4, 2003

Inland Production Company Route #3, Box 3630 Myton, UT 84052

Re: Federal 9-11-9-17 Well, 2038' FSL, 720' FEL, NE SE, Sec. 11, T. 9 South, R. 17 East,

Uintah County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann.§ 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-35158.

Sincerely,

John R. Baza Associate Director

pab Enclosures

cc: Uintah County Assessor

Bureau of Land Management, Vernal District Office



Operator: Inland Production Company						
Well Name & Number_		Federal 9-11-9-17				
API Number:		43-047-35158				
Lease:		U-075174				
Location: <u>NE SE</u>	Sec. 11	<b>T.</b> <u>9 South</u>	<b>R.</b> <u>17 East</u>			

#### **Conditions of Approval**

#### 1. General

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

#### 2. Notification Requirements

Notify the Division within 24 hours of spudding the well.

• Contact Carol Daniels at (801) 538-5284.

Notify the Division prior to commencing operations to plug and abandon the well.

Contact Dan Jarvis at (801) 538-5338

#### 3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

- 4. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.
- 5. This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.

Form 3160-3 (September 2001)	FORM APPR OMB No. 100 Expires January	04-0136			
UNITED STATES DEPARTMENT OF THE IN	5. Lease Serial No.				
BUREAU OF LAND MANAC	U-075174				
APPLICATION FOR PERMIT TO DE	6. If Indian, Allottee or	Tribe Name			
la. Type of Work: I DRILL REENTER	7. If Unit or CA Agreeme	ent, Name and No.			
•			N/A 8. Lease Name and Well	NT-	
lb. Type of Well: 🖾 Oil Well 🚨 Gas Well 🚨 Other 🖾 Single Zone 🚨 Multiple Zone			Federal 9-11-9-17		
Name of Operator     Inland Production Company			9. API Well No.	35158	
3a. Address	3b. Phone No. (include area code)		10. Field and Pool, or Exp		
Route #3 Box 3630, Myton UT 84052	(435) 646-3721	1773	Monument Butte	•	
4. Location of Well (Report location clearly and in accordance with	anv State requirements.*)	= + ;;	11. Sec., T., R., M., or Blk	. and Survey or Area	
At surface NE/SE 2038' FSL 720' FEL	AUG % R 2003		NE/SE Sec. 11. T	'06 D47E	
At proposed prod. zone	The same of the same		NE/SE Sec. 11, T	30 KI/E	
14. Distance in miles and direction from nearest town or post office*	· · · · · · · · · · · · · · · · · · ·		12. County or Parish	13. State	
Approximatley 16.1 miles southeast of Myton, Utah	MAN		Uintah	UT	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig, unit line, if any) Approx. 602' f/lse, NA f/unit	16. No. of Acres in lease	17. Spacin	ng Unit dedicated to this well 40 Acres		
(11111111111111111111111111111111111111		20 271.55			
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.  Approx. 2443'	19. Proposed Depth 6500'		M/BIA Bond No. on file #4488944		
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will sta	<u> </u> 	23. Estimated duration		
5081' GR	4th Quarter 2003				
	24. Attachments				
The following, completed in accordance with the requirements of Onshor	e Oil and Gas Order No.1, shall be att	ached to thi	s form:		
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan,</li> <li>A Surface Use Plan (if the location is on National Forest System SUPO shall be filed with the appropriate Forest Service Office).</li> </ol>	Item 20 above).  5. Operator certific	ation. specific inf	ns unless covered by an exis	-	
25. Signature	Name (Printed/Typed)		. Dai	ta .	
Mandie Crozier Mandie Crozier			į Dai	<sup>®</sup> 8/27/03	
Title Regulatory Specialist	·			<u> </u>	
Approved by (Signostine)	Name (Printed/Typed)		Da	te /_/	
Howard Loarnes	1		OF	s/18/20DY	
Title Assistant Field anager	Office			<del>/-/-                                  </del>	
Application approval does not warrant or certify the the applicant holds le	gal or equitable title to those rights in	the subject	lease which would entitle the	applicant to conduct	
operations thereon. Conditions of approval, if any, are attached.	ITIONS OF A	PR	OVAL ATTA	ACHED	
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it States any false, fictitious or fraudulent statements or representations as to	a crime for any person knowingly an any matter within its jurisdiction.	d willfully	to make to any department o	r agency of the United	

\*(Instructions on reverse)

### **NOTICE OF APPROVAL**

RECEIVED
JUN 2 8 2004

COAs Page 1 of 2 Well No.: FEDERAL 9-11-9-17

## CONDITIONS OF APPROVAL APPLICATION FOR PERMIT TO DRILL

Company/Operator: _	Inland Production Company						
Well Name & Number:	FEDERAL 9-11-9-17						
API Number:	43-047-35158						
Lease Number:	UTU - 075174						
Location: <u>NESE</u>	Sec. <u>11</u> TWN: <u>9S</u> RNG: <u>17E</u>						
Agreement:	N/A						

For more specific details on notification requirements, please check the Conditions of Approval for Notice to Drill and Surface Use Program.

COAs Page 2 of 2 Well No.: FEDERAL 9-11-9-17

#### CONDITIONS OF APPROVAL FOR NOTICE TO DRILL

Approval of this application does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Submit an electronic copy of all logs run on this well in LAS format. This submission will replace the requirement for submittal of paper logs to the BLM.

Be aware fire restrictions may be in effect when location is being constructed and/or when well is being drilled. Contact the appropriate Surface Management Agency for information.

#### A. DRILLING PROGRAM

1. Casing Program and Auxiliary Equipment

As a minimum, the usable water and oil shale resources shall be isolated and/or protected by having a cement top for the production casing at least 200 ft. above the top of the Green River Formation, identified at  $\pm 2,426$  ft.

## SURFACE USE PROGRAM CONDITIONS OF APPROVAL (COAs)

The reserve pit shall be lined because of its location next to Butte Reservoir.

## DIVISION OF OIL, GAS AND MINING

### **SPUDDING INFORMATION**

Name of Cor	npany:	INLAND PR	TION COM	<u>IPANY</u>		
Well Name:_		FEDERAL 9	<u>-11-9-17</u>	7		
Api No <u>:</u>	43-047-3515	58	Lea	se Type:	FEDERA	L
Section_11	Township_	09S Range	17E	_County	UINTAH	
Drilling Cont	tractor	EDS		RI	G# <u>1</u>	_
SPUDDE	D:					
	Date	08/03/04	<del></del>			
	Time	9:00 PM	<del></del>			
	How	DRY				
Drilling wi	ll commene	ce:				
Reported by_		FLOYD MITC	HELL			
Telephone#_		1-435-823-3610	)			
Date <u>08</u>	3/03/2004	Signe	d	CHD		

2

INCAND

4356463831

89:51

88/85/2884

(3/94)

NOTE: Use COMMENT section to explain why such Action Code was selected.

STATE OF UTAH DIVISION OF OIL, GAS AND MINING **ENTITY ACTION FORM -FORM 6**  OPERATOR: INLAND PRODUCTION COMPANY ADDRESS: RT. 3 BOX 3630

MYTON, UT 84052

OPERATOR ACCT. NO.

N5160

August 5, 2004 Date

CTION	CLIRRENT	MEW.	API NUMBER	WELL RAME			WAL	LOCATION	<del></del>	SPUD	т
CCCE	ERETTY NO.	ENTITY NO.			60	SC	170	RG	COUNTY	DATE	EFFECTIVE
A	99999	14248	43-013-32393	Ashley Federal 4-13-9-15	NWINW	13	98	15E	Duchesne		8/5/04
EL 10	maents:	no	nPA -GR		Isasara		1 30	1 196	Duchesiae	July 22, 2004	1 815/04
HOR	CURRENT	MEW	API KAMBER	WELL NAME			WELL LOCAL	RON		SPUC	B-FECTIVE
COUTE	ENTITY RO.	ENTITY NO.	***************************************		90	SC	TP	RG	COUNTY	DATE	DATE
В	99999	12704	43-013-32503	BlackJack Federal 15-10-9-17	SW/SE	10	95	17E	Duchesne	July 27, 2004	8/5/04
	DUMENTS:	<b>.</b>	GREV			· · ·					1 -1 -10 /
CODE	CURRENT ENTITY NO.	HEW	API NUMBER	ANEIT NAME	ļ		WELL	COCATION		SPUD	EFFECTIVE
W/E	ENITY NO.	ENTITY NO.	<u>,                                      </u>		<u>  °°  </u>	âC	TP T	RG	COLMIN	DATE	DATE
В	99999 ************	12704	43-013-32504	BlackJack Federal 13-10-9-17	SWISW	10	95	17E	Duchesne	July 29, 2004	8/5/04
ACTION	CURRENT	NEW	GCEV API HUMBER	WELL NAME			METT	OCATION		SPUG	E-HECKWE
A	99999	14349	43-047-35157,	Federal 7-11-9-17	SWAE	11	98	17E	Uintah	August 2, 2004	8/5/04
ELL 4 CO	HAMENTS:		GRRU		- <del>1</del>					Sandana; el ened	1 /3/04
СПОН	CURRENT	NEW	API MUMBER	WELL HAVE			MELL	OCATION		SPUD	T
CODE	EMILTY NO.	ENTITY NO.	<del></del>		00	8C	TP	RG	COUNTY	DATE	EFFECTIVE DATE
A	99999	14250	43-047-35158	Federal 9-11-9-17	NEISE	11	98	17E	Uintsh	August 3, 2004	8/5/04
	MARENTE:		GRRU								1. 13/09
6- E	stablich new ord by Ad new well to eats	iens en back of form) for naw well (single we ting critiy group er un ting whiling anthy to a	i svelij						A AUX	ie Syn 6	Kebbis S. Ja
0 - F		one existing entity to a		RECEIVE	ED				Production Cleri		August 5, 2004
				Allo -					Title	<del></del>	Cole

AUG 0 5 2004 DIV. OF OIL, GAS & MINING

FORM 3160-5	
(June 1990)	

FORM APPROV	ED
Budget Bureau Ne	. 1004-013

Budget F	Burcau No.	1004-013
Expires:	March 31	1993

BUREAU OF L	Expires: March 31, 1993  5. Lease Designation and Serial No.  U-075174  6. If Indian, Allottee or Tribe Name  NA		
Do not use this form for proposals to drill or to deep Use "APPLICATION FO			
	TRIPLICATE	7. If Unit or CA, Agreement Designation N/A	
1. Type of Well  X Oil Well Gas Well Other		8. Well Name and No.  FEDERAL 9-11-9-17 9. API Well No.	
Name of Operator     INLAND PRODUCTION COMPANY      Address and Telephone No.	43-047-35158  10. Field and Pool, or Exploratory Area  MONUMENT BUTTE		
Rt. 3 Box 3630, Myton Utah, 84052 435-646-3721  4. Location of Well (Footage, Sec., T., R., m., or Survey Description)  2038 FSL 720 FEL NE/SE Section 11, T9S R17E		11. County or Parish, State  UINTAH COUNTY, UT	
12. CHECK APPROPRIATE BOX(s) TYPE OF SUBMISSION	TO INDICATE NATURE OF NOTICE, REPORT		
Notice of Intent  X Subsequent Report  Final Abandonment Notice	Abandonment Recompletion Plugging Back Casing Repair Altering Casing  X Other Spud Notice	Change of Plans New Construction Non-Routine Fracturing Water Shut-Off Conversion to Injection Dispose Water	

On 08/03/04 MIRU EDSI ES#1 .Spud well @ 2:30 PM Drill 310' of 12 1/4 hole with air mist, TIH w/7 Jts 8 5/8 J55 24# csgn. Set @ 297.15'./KB. On 08/06/04. Cement with 150 sks of Class "G" w/ 2% CaCL2 + 1/4# sk Cello-Flake Mixed @ 15.8 ppg > 1.17 cf/sk yeild. 2 bbls cement returned to surface. WOC.

14. I hereby certify	that the foregoing is true and correct				
Signed	also miter	Title	Drilling Foreman	Date	08/06/04
	Floyd Mitchell	_			
CC: UTAH	DOGM				
(This space fo	or Federal or State office use)				
Approved b	у	Title		Date	
Conditions of	approval, if any:				OFWED
CC: Utah D0	ОСМ		·		RECEIVED

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fradulent statements or representations as to any matter within its jurisdiction.

AUG 1 0 2004

<sup>13.</sup> Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

## INLAND PRODUCEN COMPANY - CASING & CEMER REPORT

DATE 8/6/2004

.,			<u>8 5/8</u>	CASING SET	AT	297.15			
		~			00501705		Internal Due		
	<u></u>	SE17	4 302'					duction Co	mpany
DATUM				<u> </u>		Federal 9-			
DATUM TO				<del></del>		SPECT			
DATUM TO I					CONTRACT	OR & RIG #		EDSI ES#1	
			ER						
HOLE SIZE	12 1/4								
LOG OF CAS	SING STRIN	G:							
PIECES	ÓD	ITEM -	MAKE - DESCI	RIPTION	WT / FT	GRD	THREAD	CONDT	LENGTH
			40.71 shoe jt						
		WHI - 92 cs	•	•			8rd	Α	0.95
7	8 5/8"	Maverick ST			24#	J-55	8rd	Α	285.3
			<u> </u>	shoe			8rd	Α	0.9
CASING INV	ENTORY B	AL.	FEET	JTS	TOTAL LEN	GTH OF STI	RING		287.15
TOTAL LEN	GTH OF STE	RING	287.15	7	LESS CUT	OFF PIECE			2
LESS NON (	CSG. ITEMS		1.85		PLUS DATU	ЈМ ТО Т/СИТ	OFF CSG		12
PLUS FULL	JTS. LEFT (	DUT	0		CASING SE	T DEPTH			297.15
	TOTAL		285.3	7	],				•
TOTAL CSG	. DEL. (W/O	THRDS)	285.3	7	] } COMPAF	RE			
TIMING			1ST STAGE		]				
BEGIN RUN	CSG.	SPUD	8/3/2004	2:30 PM	GOOD CIRC	THRU JOB		Yes	
CSG. IN HO	LE		8/4/2004	5:00 PM	Bbls CMT C	IRC TO SUR	FACE	2 BBLS	
BEGIN CIRC	;		8/6/2004	9:31 AM	RECIPROC	ATED PIPE I	OR	_THRU	FT STROKE
BEGIN PUM	P CMT		8/6/2004	9:46 AM	DID BACK F	PRES. VALVI	E HOLD ?	N/A	
BEGIN DSPI	L. CMT		8/6/2004	9:58 AM	BUMPED P	LUG TO		687	PSI
PLUG DOW	N		Cemented	8/6/2004	10:05 AM				
CEMENT US	SED			CEMENT CO	MPANY-	BJ			
STAGE	# SX			CEMENT TYP	PE & ADDITIN	/E\$			
1	150	Class "G" w	// 2% CaCL2 +	1/4#/sk Cello-F	lake mixed (	@ 15.8 ppg 1	.17 cf/sk yie	ld	
						<u> </u>			
CENTRALIZ	ER & SCRA	TÇHER PLA	CEMENT		·	SHOW MAK	E & SPACII	NG	·
Centralizers	s - Middle fi	rst, top seco	ond & third for	3					

COMPANY REPRESENTATIVE Floyd Mitchell

,FORM 3160-5 June 1990)

3. Address and Telephone No.

2038 FSL 720 FEL

INLAND PRODUCTION COMPANY

4. Location of Well (Footage, Sec., T., R., m., or Survey Description)

Rt. 3 Box 3630, Myton Utah, 84052 435-646-3721

## ITED STATES

FORM A	APPROVE.	ь
Budget	Bureau No.	1004-0135
Evniree	March 31	1993

Expires:	March 31, 1993	
2.00000		

10. Field and Pool, or Exploratory Area MONUMENT BUTTE

**UINTAH COUNTY, UT.** 

11. County or Parish, State

0 0 9 SUNDRY NOTICES AND REPORTS ON WELLS	Expires: March 31, 1993  5. Lease Designation and Serial No.  U-075174
Do not use this form for proposals to drill or to deepen or reentry a different reservoir.  Use "APPLICATION FOR PERMIT -" for such proposals	6. If Indian, Allottee or Tribe Name  NA
SUBMIT IN TRIPLICATE  1. Type of Well	7. If Unit or CA, Agreement Designation N/A
X Oil Gas Well Other	8. Well Name and No. FEDERAL 9-11-9-17
2. Name of Operator	9. API Well No. 43-047-35158

TYPE OF SUBMISSION	to indicate nature of notice, report type of	FACTION
X Notice of Intent  Subsequent Report  Final Abandonment Notice	Abandonment Recompletion Plugging Back Casing Repair Altering Casing X Other Permit Extension	Change of Plans New Construction Non-Routine Fracturing Water Shut-Off Conversion to Injection Dispose Water (Note: Report results of multiple completion on Wo

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

NE/SE Section 11, T9S R17E

Inland Production Company requsts to extend the Permit to Drill this well for one year. The original approval date was 9/4/03 (expiration 9/4/04).

> Approved by the Utah Division of Oil, Gas and Mining

AUG 2 4 2004

DIV. OF OIL. GAS & MININ

. Watershap				and a MINING
14. I hereby certify that the foregoing is the and correct Signed Mandie Crozier	Croyes Title	Regulatory Specialist	Date	8/27/04
CC: UTAH DOGM				
(This space for Federal or State office use)				
Approved by	Title		Date	armontolo d
Conditions of approval, if any:				
CC_Utah_DOGM				

# Application for Permit to Drill Request for Permit Extension Validation

Validation
(this form should accompany the Sundry Notice requesting permit extension)

43-047-35158

API:

Well Name: Federal 9-11-9-17 Location: NE/SE Section 11, T9S R17E Company Permit Issued to: Inland Production Company Date Original Permit Issued: 9/4/2003
The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision.
Following is a checklist of some items related to the application, which should be verified.
If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes□No□ ∩∩
Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes□No
Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes□NoX
Have there been any changes to the access route including ownership, or right-of-way, which could affect the proposed location? Yes□NoД
Has the approved source of water for drilling changed? Yes□No
Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes□No♥
Is bonding still in place, which covers this proposed well? Yes No□
Signature Coxes  8/27/2004  Date
Title: Regulatory Specialist
Representing: Inland Production Company

FORM 3160-5 (September 2001)

Final Abandonment Notice

## UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

LOWN WILKOARD
OMB No. 1004-0135
Expires January 31,2004

5.	Lease	Serial	No.
Ι.			

Water Disposal

SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

Convert to Injector

UTU075174

6. If Indian, Allottee or Tribe Name.

0 1 0 abandoned w	oned well. Use Form 3160-3 (APD) for such proposals.				6. If Indian, Allottee or Tribe Name.		
SUBMET IN TRIPLICATE - Other Instructions on reverse side					7. If Unit or CA/Agreement, Name and/or No. S PLEASANT VALLEY		
2. Name of Operator	Other			8. Well Name and FEDERAL 9-1			
Newfield Production Company  3a. Address Route 3 Box 3630		3b. Phone No. (include are	code)	9. API Well No. 4304735158			
Myton, UT 84052 4. Location of Well (Footage, Sec	., T., R., M., or Survey Descriptio	435,646.3721 n)		10. Field and Poo Monument But	ol, or Exploratory Area te		
2038 FSL 720 FEL NE/SE Section 11 T9S R1	7E ·			11. County or Pa  Duchesne, UT	rish, State		
12. CHECK	APPROPRIATE BOX(E	S) TO INIDICATE NA	TURE OF	NOTICE, OR O	THER DATA		
TYPE OF SUBMISSION		TYP	E OF ACTIO	ON			
☐ Notice of Intent  ☑ Subsequent Report	Acidize Alter Casing Casing Repair	Deepen Fracture Treat New Construction	Production Reclar		☐ Water Shut-Off ☐ Well Integrity ☑ Other		
<del></del>			orarily Abandon	Weekly Status Report			

Plug Back

On 9-23-04 MIRU NDSI Rig # 2. Set all equipment. Pressure test Kelly, TIW, Choke manifold, & Bop's to 2,000 psi. Test 8.625 csgn to 1,500 psi. Vernal BLM field, & Roosevelt DOGM office was notifed of test. PU BHA and tag cement @ 285'. Drill out cement & shoe. Drill a 7.875 hole with fresh water to a depth of 5,800'. Lay down drill string & BHA. Open hole log w/ Dig/SP/GR log's TD to surface. PU & TIH with Guide shoe, shoe jt, float collar, 136 jt's of 5.5 J-55, 15.5# csgn. Set @ 5792' / KB. Cement with 285 sks cement mixed @ 11.0 ppg & 3.43 yld. The 375 sks cement mixed @ 14.4 ppg & 1.24 yld. With 50 of 50 bbls dye water returned to pit. Nipple down Bop's. Drop slips @ 70,000 #'s tension. Release rig 11:00 am on 9-28-04.

RECEIVED

SEP 3 0 2004

S.V. OF OIL, CHOIL THAIL.

I hereby certify that the foregoing is true and correct	Title	
Name (Printed Typed) Ray Herrera	Drilling Foreman	
Signature Ray Herman	Date 9/29/2004	
THIS SPACE	e for federal or state offic	CE USE
Approved by	Title	Date
Conditions of approval, if any, are attached. Approval of this notice do certify that the applicant holds legal or equitable title to those rights in the which would entitle the applicant to conduct operations thereon.		
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it States any false, fictitious and fraudulent statements or representations a		to any department or agency of the United

<sup>13.</sup> Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

٠.			5 1/2"	CASING SET	AT	5792.16			
					Fit clir @		-		
LAST CASIN	IG 8 5/8"	SET	4 297'		OPERATOR	₹	Newfield F	roduction (	Company
DATUM		<del></del>	<del></del>		WELL			<u> </u>	
		ASING	12'				Monumen	t Butte	
DATUM TO	BRADENHE	AD FLANGE			CONTRACT	OR & RIG#		NDSI rig #2	1
TD DRILLER	5800'	LOGG	ER						
HOLE SIZE			<del></del>						
LOG OF CAS	SING STRIN	G:							
PIECES	OD	ITEM -	MAKE - DESCI	RIPTION	WT/FT	GRD	THREAD	CONDT	LENGTH
		Landing Jt							14
		Short Jt @	4020.69'KB						
136	5 1/2"	ETC LT & C	casing		15.5#	J-55	8rd	Α	5758.91
	:	Float collar							0.6
1	5 1/2"	ETC LT&C	csg		15.5#	J-55	8rd	Α	20
			GUIDE	shoe			8rd	Α	0.65
CASING INV	ENTORY BA	AL.	FEET	JTS	TOTAL LEN	GTH OF ST	RING		5794.16
TOTAL LEN	GTH OF STE	RING	5794.16	136	LESS CUT	OFF PIECE			14
LESS NON (	CSG. ITEMS		15.25		PLUS DATU	JM ТО Т/CU	T OFF CSG		12
PLUS FULL	JTS. LEFT C	DUT	128.12	3	CASING SE	T DEPTH			5792.16
	TOTAL		5907.03	140	۱				
TOTAL CSG	. DEL. (W/O	THRDS)	5907.03	140	Д СОМРАБ	RE			
TIMING			1ST STAGE	2nd STAGE					
BEGIN RUN	CSG.		9/28/2004	2:00 AM	GOOD CIRC	C THRU JOE	3	YES	
CSG. IN HO	LE		9/28/2004	6:00 AM	Bbis CMT C	IRC TO SUF	RFACE	0,all spacers	to pit
BEGIN CIRC	<b>;</b>	,,,,,,	9/28/2004	6:00 AM	RECIPROC	ATED PIPE	FOR	THRUSTROP	<u>KE</u>
BEGIN PUM	P CMT		9/28/2004	7:05 AM	DID BACK F	PRES. VALV	E HOLD?	yes	
BEGIN DSPI	L. CMT		9/28/2004	7:48 AM	BUMPED P	LUG TO _		2023	PSI
PLUG DOW	N		9/28/2004	8:12 AM					
CEMENT US	ED			CEMENT CO	MPANY-	B. J.			
STAGE	# SX		- a	CEMENT TY	PE & ADDITI\	/ES			
1	285	Premlite II w	v/ 10% gel + 3 °	% KCL, 3#'s /s	k CSE + 2# s	k/kolseal + 1	/4#'s/sk Cello	Flake	
		mixed @ 11	I.0 ppg W / 3.43	cf/sk yield					
2	375	50/50 poz V	V/ 2% Gel + 3%	KCL, .5%EC1	,1/4# sk C.F.	2% gel. 3%	SM mixed @	14.4 ppg W/	1.24 YLD
CENTRALIZ	ER & SCRA	TCHER PLA	CEMENT			SHOW MAI	KE & SPACIN	IG	<u> </u>
Centralizer	s - Middle fi	rst, top sec	ond & third. T	hen every thi	rd collar for	a total of 20	D		
								100	
								-····	

COMPANY REPRESENTATIVE Ray Herrera

DATE <u>9/28/2004</u>

FORM 3160-5 (September 2001)

## UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APP OVED OMB No. 10 1-0176 Expires January 54, 604	PY	,
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011

	EPARTMENT OF THE IN			Exp	bires January 51, 504				
<b>I</b>	BUREAU OF LAND MANA	GEMENT		5. Lease Serial N	0.				
SUNDRY	NOTICES AND REPOI	RTS ON WELLS		UTU075174					
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.  6. If Indian, Allottee or Tribe Name.		ee or Tribe Name.							
	RIPLICATE - Other to	fictions online (ASE si		7. If Unit or CA/A S PLEASANT V	greement, Name and/or No.				
. Type of Well  X Oil Well Gas Well	Other _			8. Well Name and	No.				
Oil Well Gas Well Name of Operator	_ Other			FEDERAL 9-11	. = . = .				
Newfield Production Company				9. API Well No.					
a. Address Route 3 Box 3630		3b. Phone No. (include are	code)	4304735158					
Myton, UT 84052		435.646.3721		10. Field and Pool, or Exploratory Area					
Location of Well (Footage, Sec	., T., R., M., or Survey Descriptio	n)		Monument Butt	e				
2038 FSL 720 FEL				<ol> <li>County or Par</li> </ol>	ish, State				
NE/SE Section 11 T9S R1	7E			Duchesne, UT					
12. CHECK	APPROPRIATE BOX(E	S) TO INIDICATE NA	TURE OF NO	OTICE, OR OT	HER DATA				
TYPE OF SUBMISSION		TYP	E OF ACTION						
Notice of Intent	Acidize Alter Casing	Deepen Fracture Treat	Production	n(Start/Resume) on	☐ Water Shut-Off ☐ Well Integrity				
X Subsequent Report	Casing Repair	New Construction	Recomple	te	X Other				
	Change Plans	Plug & Abandon	Temporar	ily Abandon	Weekly Status Report				
Final Abandonment Notice	Convert to Injector	Plug Back	Water Dis						
"- 1 4 1/14	The second control of	المستميمة والمستناء والمتاب والمتاب والمستناء والمتاب	data af ann ananasa.	بمناب مستسم الرسم واسميت الا	sa dunation themself If the meanword in				

Status report for time period 10/11/04 - 10/20/04

Subject well had completion procedures initiated in the Green River formation on 09/15/04 without the use of a service rig over the well. A cement bond log was run and a total of five Green River intervals were perforated and hydraulically fracture treated w/ 20/40 mesh sand. Perf intervals were #1 (5497-5501'), (5527-5533'), (5554-5560) (ALL 4 JSPF); #2 (5373-5376'), (5400-5408'), (5416-5420'), (ALL 4 JSPF); #3 (4917-4921'), (4935-4940'), (4951-4962') (ALL 4 JSPF); #4 (4772-4778'), (4788-4791'), (4802-4810') (ALL 4 JSPF); #5 (4528-4533'), (4548-4558'), (4575-4585') (ALL 4 JSPF). Composite flow-through frac plugs were used between stages. Fracs were flowed back through chokes. A service rig was moved on well on 10/15/04. Bridge plugs were drilled out. Well was cleaned out to PBTD @ 5771'. Zones were swab tested for sand cleanup. A BHA & production tbg string were run in and anchored in well. End of tubing string @ 5625.09'. A new 1 1/2" bore rod pump was run in well on sucker rods. Well was placed on production via rod pump on 10/20/04.

RECEIVED OCT 2 6 2004

I hereby certify that the foregoing is true and correct	Title		DIV. OF OIL, GAS & A
Name (Printed Typed) Renee Palmer	Production (	Clerk	
Signature	Date 10/21/2004		
THE ADMINISTRACE PROPERTY			
Approved by	Т	Title .	Date
Conditions of approval, if any, are attached. Approval of this notice does not warrant certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	I .	Office	
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any States any false, fictitious and fraudulent statements or representations as to any matter			ke to any department or agency of the United

<sup>13.</sup> Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BlA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

012

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

SUBMIT IN D (See other instructions ons reverse side) FORM APPROVED OMB NO. 1004-0137

Expires: February 28, 1995

5. LEASE DESIGNATION AND SERIAL NO.

U-075174

WELL	COMP	LETION	OR R	ECON	<b>IPLETION</b>	REPORT A	AND LOG	<u>)</u> *	6. IF INDIAN, A		OR TRIBE NAME
1a. TYPE OF WORK	:								7. UNIT AGREE		
1b. TYPE OF WELL		OIL WELL	X	GA\$ WELL	DRY	Other			South	Pleasa	ant Valley Area
NEW V	work [	_	<del></del> 1	PLUG	DIFF				8. FARM OR LE	ASE NAM	Æ, WELL NO.
WELL X	OVER	DEEPEN		BACK	RESVR.	Other			FE	DERA	L 9-11-9-17
2. NAME OF OPERATOR		<b>A.</b> 1.							9, WELL NO.		
3. ADDRESS AND TELEI	PHONE NO	Ne	ewfield	Explorat	ion Compar	าy			10. FIELD AND		7-35158
		1401 17th	st. Su	ite 1000	Denver, C	O 80202			_		ent Butte
4. LOCATION OF WE	LL (Report le	ocations clearly a	nd in accor	dance with a	ny State requireme	ents.*)					OCK AND SURVEY
At Surface At top prod. Interval rep	named halavi	2038.1	-SL & 72	0. FFF (M	E SE) Sec. 11	, Twp 9S, Rng 17E	<b>=</b>		OR AREA		<b></b>
At top prout miervar rep	ported below								Se	:C. 11,	T9S, R17E
At total depth				14. API NO. 43-	-047-35158	DATE ISSUED	9/4/2003		12. COUNTY OR Uint		13. STATE
15. DATE SPUDDED		D. REACHED	17. DA	TE COMPL. (	(Ready to prod.)	18. ELEVATIONS (	DF, RKB, RT, GR,	ETC.)*		<u> </u>	19. ELEV. CASINGHEAD
8/3/2004 20. TOTAL DEPTH, MD 8	•	28/2004	7K 7 C 247		20/2004		1' GL		5093' KB		
TO TALL DEFTII, MID 6	~ 1717	21. PLUG BA		o≪ I ∧ D	HOW MA	PLE COMPL., NY*	23. INTERVALS DRILLED BY	ROTA	ARY TOOLS	Į	CABLE TOOLS
5800'			5771'				>		Х		
24. PRODUCING INTERV	AL(S), OF TH	IS COMPLETION	TOP, BOT	ГОМ, NAME	(MD AND TVD)*	· · · · · · · ·					25. WAS DIRECTIONAL
				Green F	River 452	8'-5560'					SURVEY MADE
26. TYPE ELECTRIC ANI	OTHERLOC	S DINI									No
			nsated	Density	. Compensa	ated Neutron, C	R. Caliner	Ceme	nt Bond Lo	,a	27. WAS WELL CORED NO
23.				CASIN	NG RECORD (Re	port all strings set in	well)	, 00	10 00130 20	9 1	140
CASING SIZE/O	GRADE			DEPT	TH SET (MD)	HOLE SIZE	TOP OF C				AMOUNT PULLED
0 1/2		<del>                                     </del>	<del>011</del>	·	J1 JZ	7-170	205 SX Prem	nite ii and	1 375 SX 50/5	U POZ	
29.		LIN	ER RECO	RD		<u> </u>	30.	7	TUBING RECO	ORD	
SIZE	TO	P (MD)	вотто	M (MD)	SACKS CEMENT	T* SCREEN (MD)	SIZE		EPTH SET (MD)		PACKER SET (MD)
	<del> </del>					<del> </del>	2-7/8"		EOT @ 5625'		TA @
II. PERFORATION REC	ORD (Interval	. Size and number	`			32.	ACID SHOT	PD ACTEU	RE, CEMENT	COLUMN	5523'
INT	ERVAL		SI	<u>ZE</u>	SPF/NUMBE		ERVAL (MD)				MATERIAL USED
(CP3,4) 5497-55				1"	4/64	5497'-		Frac v	v/ 33,262# 20	)/40 sar	nd in 353 bbls fluid.
(CP1,2) 5373-	•			1"	4/60	5373'-			<u> </u>		nd in 378 bbls fluid.
(A1,3) 4917-				1"	4/76	4917'-					nd in 400 bbls fluid.
(D2,3) 4528-		-91, 4802-10		1" 1"	4/68	4772'-					nd in 469 bbls fluid.
(D2,0) 4020-	33, 4340-	30, 4373-63	.4	1	4/100	4528'-	4585	Frac w	/ 103,302# 2	0/40 sa	nd in 711 bbls fluid.
······									E 181		·
7 = 4	***					****					
			***************************************		· · · · · · · · · · · · · · · · · · ·	-					
3.*						UCTION	VE 111	1			
PATE FIRST PRODUCTION 10/20/20 PATE OF TEST	004			2-		' x 16' RHAC P				PR	TUS (Producing or shut-in)
ATE OF TEST	1110	OURS TESTED	CHOKE		PROD'N. FOR TEST PERIOD	OIL-BBLS	GASMCF.	WATER	BBL.	C	GAS-OIL RATIO
10 day ave	Э		.	ł	>	121	171		5		1413
LOW. TUBING PRESS.	C/	ASING PRESSURI		R RATE	OIL-BBL.	GASMCF.		WATER	BBL. OIL		Y-API (CORR.)
4. DISPOSITION OF GAS	(Sold, used for	fuel, vented, etc.)	Sold :	> & Used t	for Fuel	<u> </u>	,	<u> </u> т	EST WITNESSED		NOV 2 9 2004
5. LIST OF ATTACHMEN	NT\$	11		. 030u	ioi i uci	· <u> </u>		<u>f</u> ,	**************************************		- 35 6 MININ
6. I hereby certify that It	he foregoing	and mached info	mation is o	complete and		ined from all available re Engine	ecords eering Tech	ınician		DATE	11/22/2004
Brian H										DATE	BDII

\*(See Instructions and Spaces for Additional Data on Reverse Side)

<ol> <li>SUMMARY OF POROUS ZONEs drill-stem, tests, including depth in recoveries);</li> </ol>	S: (Show all importa nterval tested, cushio	nt zones of porosity a n used, time tool oper	SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals, and all drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries);	38. GEOLOGIC MARKERS	MARKERS	
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.		TOP	
				NAME		TRUE
					MEAS, DEPTH	VERT. DEPTH
			Well Name Federal 9-11-9-17	Garden Gulch Mkr Garden Gulch 1	3528' 3706'	
				Garden Gulch 2	3821'	
				X Mkr	4076	
				Y-Mkr	4346'	
				Douglas Creek Mkr	4470	
				BiCarbonate Mkr	4704'	
				Castle Peak	5304	
				Basal Carbonate		
				Total Depth (LOGGERS	5805	
		,				
				-		
			** *** **** **** ***** ***** *********			
			NOV 2 9 2004			
			ONINIPP & SAS ILC IIC VIC			



November 22, 2004

State of Utah, Division of Oil, Gas and Mining

Attn: Ms. Carol Daniels

P.O. Box 145801

Salt Lake City, Utah 84114-5801

Attn:

Ms. Carol Daniels

Blackjack Federal 9-33-8-17 (43-013-32515)

Blackjack Federal 10-4-9-17 (43-013-32509)

Ashley Federal 9-15-9-15 (43-013-32470)

Ashley Federal 10-15-9-15 (43-013-32471)

Federal 9-11-9-17 (43-047-35158)

Dear Ms. Carol Daniels

Enclosed is a Well Completion or Recompletion Report and Log form (Form 3160-4). We are no longer sending Log copies since Pat Grissom of Phoenix Surveys is already doing so.

If you should have any questions, please contact me at (303) 382-4449.

Sincerely,

Brian Harris

**Engineering Tech** 

**Enclosures** 

CC:

**Bureau of Land Management** 

Vernal District Office, Division of Minerals

Attn: Edwin I. Forsman 170 South 500 East Vernal, Utah 84078

Well File – Denver Well File – Roosevelt Patsy Barreau/Denver Bob Jewett/Denver Marnie Bryson/Roosevelt

RECEIVED NOV 2 9 2004

DIV. OF OIL, GAS & MINING



### United States Department of the Interior



## BUREAU OF LAND MANAGEMENT Utah State Office P.O. Box 45155 Salt Lake City, UT 84145-0155 http://www.blm.gov

IN REPLY REFER TO: 3106 (UT-924)

September 16, 2004

Memorandum

To:

Vernal Field Office

From:

Acting Chief, Branch of Fluid Minerals

Subject:

Merger Approval

Attached is an approved copy of the name change recognized by the Utah State Office. We have updated our records to reflect the merger from Inland Production Company into Newfield Production Company on September 2, 2004.

Milas Lloudas

Michael Coulthard Acting Chief, Branch of Fluid Minerals

#### Enclosure

1. State of Texas Certificate of Registration

cc:

MMS, Reference Data Branch, James Sykes, PO Box 25165, Denver CO 80225 State of Utah, DOGM, Attn: Earlene Russell, PO Box 145801, SLC UT 84114

Teresa Thompson Joe Incardine Connie Seare

			• *		•
UTSL-	15855	61052	73088	76561	
071572A	16535	62848	73089	76787	
065914	16539	63073B	73520A	76808	
.*	16544	63073D	74108	76813	
	17036	63073E	74805	76954	63073X
	17424	63073O	74806	76956	63098A
	18048	64917	74807	77233	68528A
UTU-	18399	64379	74808	77234	72086A
	19267	64380	74389	77235	72613A
02458	26026A	64381	74390	77337	72013A 73520X
03563	30096	64805	74391	77338	73320X 74477X
03563A	30103	64806	74392	77339	75023X
04493	31260	64917	74393	77357 <sup>.</sup>	76189X
05843	33992	65207	74398	77359	76331X
07978	34173	65210	74399	77365	76788X
09803	34346	65635	74400	77369	77098X
017439B	36442	65967	74404	77370	77107X
017985	36846	65969	74405	77546	77236X
017991	38411	65970	74406	77553·	77376X
017992	38428	66184	74411	77554	78560X
018073	38429	66185	74805	78022	79485X
019222	38431	66191	74806	79013	79641X
020252	39713	67168	74826	79014	80207X
020252A	39714	67170	74827	79015	81307X
020254	40026	67208	74835	79016	0130711
020255	40652	67549	74868	79017	
020309D	40894	67586	74869	79831	
022684A	41377	67845	74870	79832	
027345	44210	68105	74872	79833 <sup>,</sup>	
034217A	44426	68548	74970	79831	
035521	44430	68618	75036	79834	•
035521A	45431	69060	75037	80450	
038797	47171	69061	75038	80915	
058149	49092	69744	75039	81000	
063597A	49430	70821	75075		•
075174	49950	72103	75078		
096547	50376	72104	75089		
096550	50385	72105	75090		
	50376	72106	75234		
	50750	72107	75238		
10760	51081	72108	76239		
11385	52013	73086	76240		•
13905	52018	73087	76241		
15392	58546	73807	76560	•	

Corporations Section P.O.Box 13697 Austin, Texas 78711-3697





#### Office of the Secretary of State

The undersigned, as Secretary of State of Texas, does hereby certify that the attached is a true and correct copy of each document on file in this office as described below:

Newfield Production Company Filing Number: 41530400

Articles of Amendment

September 02, 2004

In testimony whereof, I have hereunto signed my name officially and caused to be impressed hereon the Seal of State at my office in Austin, Texas on September 10, 2004.





Secretary of State

# ARTICLES OF AMENDMENT TO THE ARTICLES OF INCORPORATION OF INLAND PRODUCTION COMPANY

In the Office of the Secretary of State of Texas

SEP 02 2004

Corporations Section

Pursuant to the provisions of Article 4.04 of the Texas Business Corporation Act (the "TBCA"), the undersigned corporation adopts the following articles of amendment to the articles of incorporation:

#### ARTICLE 1 - Name

The name of the corporation is Inland Production Company.

#### ARTICLE 2 - Amended Name

The following amendment to the Articles of Incorporation was approved by the Board of Directors and adopted by the shareholders of the corporation on August 27, 2004.

The amendment alters or changes Article One of the Articles of Incorporation to change the name of the corporation so that, as amended, Article One shall read in its entirety as follows:

"ARTICLE ONE - The name of the corporation is Newfield Production Company."

ARTICLE 3 - Effective Date of Filing

This document will become effective wpon filing.

The holder of all of the shares outstanding and entitled to vote on said amendment has signed a consent in writing pursuant to Article 9.10 of the TBCA, adopting said amendment, and any written notice required has been given.

IN WITNESS WHEREOF, the undersigned corporation has executed these Articles of Amendment as of the 1<sup>st</sup> day of September, 2004.

INLAND RESOURCES INC.

Susan G. Riggs, Treasurer

#### **OPERATOR CHANGE WORKSHEET**

013

Change of Operator (Well Sold)

#### ROUTING 1. GLH 2. CDW

3. FILE

Designation of Agent/Operator

#### X Operator Name Change

#### Merger

The operator of the well(s) listed below l	nas changed	, effect	ive:			9/1/2004			]
FROM: (Old Operator):				<b>TO:</b> ( New O	perator):				7
N5160-Inland Production Company				N2695-Newfie		n Company	y		
Route 3 Box 3630				Route 3	Box 3630				1
Myton, UT 84052				Myton,	UT 84052				1
Phone: 1-(435) 646-3721				Phone: 1-(435)	646-3721				
CA	No.			Unit:					
WELL(S)									_
NAME	SEC	TWN	RNG	API NO	ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS	
FEDERAL 10-1-9-17	01	2000	170E	4304735090		Federal	OW	DRL	K
FEDERAL 9-1-9-17	01			4304735179		Federal	ow	P	K
FEDERAL 11-1-9-17	01			4304735179		Federal	low	P	K
FEDERAL 1-11-9-17	11			4304735156	<u> </u>	Federal	ow	P	K
FEDERAL 7-11-9-17	11			4304735157		Federal	ow	P	K
FEDERAL 9-11-9-17	11			4304735158	·	Federal	low ow	P	K
FEDERAL 11-11-9-17	11			4304735159	<u> </u>	Federal	ow	P	K
FEDERAL 15-11-9-17	11			4304735160		Federal	ow	P	K
FEDERAL 3-12-9-17				4304735162		Federal	ow	P	K
FEDERAL 1-12-9-17	12			4304735163		Federal	ow	DRL	K
FEDERAL 5-12-9-17	12			4304735164	1	Federal	ow	P	K
FEDERAL 7-12-9-17	12			4304735165	1	Federal	ow	P	K
FEDERAL 9-12-9-17	12			4304735166		Federal	ow	DRL	K
FEDERAL 11-12-9-17	12			4304735167		Federal	ow	P	K
FEDERAL 13-12-9-17	12			4304735168		Federal	ow	P	K
FEDERAL 15-12-9-17	12			4304735169		Federal	ow	P	K
FEDERAL 2-25-9-17	25			4304734951		Federal	ow	APD	K
FEDERAL 3-14-9-18	14	<u></u>		4304734943		Federal	ow	APD	K
FEDERAL 4-14-9-18	14			4304734944		Federal	ow	APD	K
FEDERAL 2-23-9-18	23			4304734950		Federal	ow	APD	K

#### **OPERATOR CHANGES DOCUMENTATION**

#### Enter date after each listed item is completed

(R649-8-10) Sundry or legal documentation was received from the FORMER operator on:
 (R649-8-10) Sundry or legal documentation was received from the NEW operator on:

3. The new company was checked on the Department of Commerce, Division of Corporations Database on: 2/23/2005

4. Is the new operator registered in the State of Utah: YES Business Number: 755627-0143

5. If NO, the operator was contacted contacted on:

a. (R649-9-2)Waste Management Plan has been received on:	IN PLACE			
. Inspections of LA PA state/fee well sites complete on:	waived			
. Federal and Indian Lease Wells: The BLM and or	* *			•
or operator change for all wells listed on Federal or Indian le	ases on:	BLM_	<u>BI</u>	<u>A</u>
. Federal and Indian Units:		,		
The BLM or BIA has approved the successor of unit opera	tor for wells listed on	ı:	n/a	
			5	
<ol> <li>Federal and Indian Communization Agreemen         The BLM or BIA has approved the operator for all wells list     </li> </ol>	, ,		no/	
The BENT of BIA has approved the operator for an wens in	sted within a CA on:		na/	
0. Underground Injection Control ("UIC") Th	e Division has appro	ved UIC Fori	n 5, <b>Transfe</b>	r of Authority to
Inject, for the enhanced/secondary recovery unit/project for	the water disposal we	ell(s) listed or	n: <u>2/</u> :	23/2005
PATA ENTRY:				
. Changes entered in the Oil and Gas Database on:	2/28/2005			
Changes have been entered on the Monthly Operator Chan	ge Spread Sheet on:	: <u>2</u>	/28/2005	
. Bond information entered in RBDMS on:	2/28/2005			
	2/20/2000			
Fee/State wells attached to bond in RBDMS on:	2/28/2005			
Injection Projects to new operator in RBDMS on:	2/28/2005			
. Receipt of Acceptance of Drilling Procedures for APD/New	on:	waived		
EDERAL WELL(S) BOND VERIFICATION:				
Federal well(s) covered by Bond Number:	UT 0056			
NDIAN WELL(S) BOND VERIFICATION:	(1D0DD110010			
. Indian well(s) covered by Bond Number:	61BSBDH2912			
EE & STATE WELL(S) BOND VERIFICATION	<b>1:</b>			
. (R649-3-1) The NEW operator of any fee well(s) listed cove		f 61B	SBDH2919	
. The FORMER operator has requested a release of liability from		n/a*		
The Division sent response by letter on:	n/a			
EASE INTEREST OWNER NOTIFICATION:				
(R649-2-10) The <b>FORMER</b> operator of the fee wells has been	n contacted and infor	med by a lett	er from the $\Gamma$	Division
of their responsibility to notify all interest owners of this chan		n/a		
COMMENTS:				
Bond rider changed operator name from Inland Production Com	pany to Newfield Pro	oduction Con	 manv - recei	ved 2/23/05
The special control of the special control contr			T	
<u> </u>				



#### United States Department of the Interior

#### **BUREAU OF LAND MANAGEMENT Utah State Office** P.O. Box 45155 Salt Lake City, UT 84145-0155



IN REPLY REFER TO 3180 UT-922

June 30, 2005

**Newfield Production Company** Attn: Kelly L. Donohoue 1401 Seventeenth Street, Suite 1000 Denver, Colorado 80202

#### Gentlemen:

The Sundance (Green River) Unit Agreement, Uintah County, Utah, was approved June 30, 2005. This agreement has been designated No. UTU82472X, and is effective July 1, 2005. The unit area embraces 11,143.86 acres, more or less.

Pursuant to regulations issued and effective June 17, 1988, all operations within the Sundance (Green River) Unit will be covered by your nationwide (Utah) oil and gas bond No. 0056.

The following leases embrace lands included within the unit area:

UTU0075174	UTU39713	UTU65970*	UTU79013*
UTU16539*	UTU39714	UTU74404	UTU79014*
UTU16540	UTU44429	UTU74835	UTU80915
UTU17424*	UTU64806*	UTU74872*	UTU82205
UTU18043	UTU65969	UTU75234	

\* Indicates lease to be considered for segregation by the Bureau of Land Management pursuant to Section 18 (g) of the unit agreement and Public Law 86-705. 2005.00

All lands and interests by State of Utah, Cause No. 228-08 are fully committed.

Approval of this agreement does not warrant or certify that the operator thereof and other holders of operating rights hold legal or equitable title to those rights in the subject leases which are committed hereto.

> RECEIVED JUL 0 / 2005

We are of the opinion that the agreement is necessary and advisable in the public interest and for the purpose of more properly conserving natural resources. Certification-Determination, signed by the School and Institutional Trust Land Administration for the State of Utah, is attached to the enclosed agreement. We request that you furnish the State of Utah and all other interested principals with appropriate evidence of this approval.

Sincerely,

/s/ Terry Catlin

Terry Catlin Acting Chief, Branch of Fluid Minerals

#### **Enclosure**

bcc: N

Mary Higgins w/enclosure

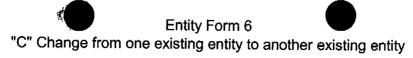
MMS - Data Management Division (Attn: James Sykes)

Trust Lands Administration
Division of Oil, Gas and Mining
Field Manager - Vernal w/enclosure

File - Sundance (Green River) Unit w/enclosure

Agr. Sec. Chron Fluid Chron Central Files

UT922:TAThompson:tt:06/30/2005



API	Well	Sec	Twsp	Rng	Entity	Entity Eff Date
4304734465	SUNDANCE 15-32-8-18	32	080S	180E		9/20/2005
4304734466	SUNDANCE 16-32-8-18	32	080S	180E	14028 to 14844	9/20/2005
4304735090	FEDERAL 10-1-9-17	01	090S	170E	14421 to 14844	9/20/2005
4304735179	FEDERAL 9-1-9-17	01	090S	170E	14075 to 14844	9/20/2005
4304735180	FEDERAL 11-1-9-17	01	090S	170E	14105 to 14844	9/20/2005
4304735181	FEDERAL 13-1-9-17	01	090S	170E	14101 to 14844	9/20/2005
4304735182	FEDERAL 15-1-9-17	01	090S	170E	14094 to 14844	9/20/2005
4304735496	FEDERAL 16-1-9-17	01	090S	170E	14481 to 14844	9/20/2005
4304735156	FEDERAL 1-11-9-17	11	090S	170E	14321 to 14844	9/20/2005
4304735157	FEDERAL 7-11-9-17	11	090S	170E	14249 to 14844	9/20/2005
4304735158	FEDERAL 9-11-9-17	11	090S	170E	14250 to 14844	9/20/2005
4304735159	FEDERAL 11-11-9-17	11	090S	170E	14287 to 14844	9/20/2005
4304735160	FEDERAL 15-11-9-17	11	0908	170E	14302 to 14844	9/20/2005
4304735295	FEDERAL 3-11-9-17	11	090S	170E	14258 to 14844	9/20/2005
4304735497	FEDERAL 16-11-9-17	11	090S	170E	14568 to 14844	9/20/2005
4304735498	FEDERAL 14-11-9-17	11	090S	170E	14621 to 14844	9/20/2005
4304735500	FEDERAL 10-11-9-17	11	090S	170E	14587 to 14844	9/20/2005
4304735501	FEDERAL 8-11-9-17	11	090S	170E	14578 to 14844	9/20/2005
4304735502	FEDERAL 2-11-9-17	11	090S	170E	14588 to 14844	9/20/2005
4304735769	FEDERAL 6-11-9-17	11_	090S	170E	14595 to 14844	9/20/2005
4304735162	FEDERAL 3-12-9-17	12	090S	170E	14343 to 14844	9/20/2005
4304735163	FEDERAL 1-12-9-17	12	090S	170E	14361 to 14844	9/20/2005
4304735164	FEDERAL 5-12-9-17	12	090S	170E	14344 to 14844	9/20/2005
4304735165	FEDERAL 7-12-9-17	12	090S	170E	14347 to 14844	9/20/2005
4304735166	FEDERAL 9-12-9-17	12	090S	170E	14391 to 14844	9/20/2005
4304735167	FEDERAL 11-12-9-17	12	090S	170E	14345 to 14844	9/20/2005
4304735168	FEDERAL 13-12-9-17	12	090S	170E	14305 to 14844	9/20/2005
4304735169	FEDERAL 15-12-9-17	12	090S	170E	14346 to 14844	9/20/2005
4304735516	FEDERAL 16-12-9-17	12	090S	170E	14569 to 14844	9/20/2005
4304735517	FEDERAL 14-12-9-17	12	090S	170E	14500 to 14844	9/20/2005
4304735518	FEDERAL 12-12-9-17	12	090S	170E	14497 to 14844	9/20/2005
4304735519	FEDERAL 10-12-9-17	12	090S	170E	14482 to 14844	9/20/2005
4304735520	FEDERAL 4-12-9-17	12	090S	170E	14553 to 14844	9/20/2005
4304735748	FEDERAL 8-12-9-17	12	090S	170E	14483 to 14844	9/20/2005
4304735749	FEDERAL 6-12-9-17	12	090S	170E	14498 to 14844	9/20/2005
4304735750	FEDERAL 2-12-9-17	12	090S	170E	14484 to 14844	9/20/2005



#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8 1595 WYNKOOP STREET DENVER, CO 80202-1129 http://www.epa.gov/region8

Ref: 8P-W-GW

APR 1 0 2008

### CERTIFIED MAIL RETURN RECEIPT REQUESTED

Eric Sundberg Regulatory Analyst Newfield Production Company 1401 Seventeenth Street, Suite 1000 Denver, CO 80202 Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY

Re: FINAL Permit

EPA UIC Permit UT21056-07130

Well: Federal 9-11-9-17 Uintah County, UT

43-047-35158

95 17E 11

Dear Mr. Sundberg:

Enclosed is your copy of the FINAL Underground Injection Control (UIC) Permit for the proposed Federal 9-11-9-17 injection well. A Statement of Basis that discusses the conditions and requirements of this EPA UIC Permit, is also included.

Please note that under the terms and conditions of this Final Permit you are authorized only to construct the proposed injection well. Prior to commencing injection, you first must fulfill all "Prior to Commencing Injection" requirements of the Final Permit, Part II Section C Subpart 1, and obtain written Authorization to Inject from the EPA. It is your responsibility to be familiar with and to comply with all provisions of your Final Permit.

This EPA UIC Permit is issued for the operating life of the well unless terminated (Part III, Section B). The EPA may review this Permit at least every five (5) years to determine whether any action is warranted pursuant to 40 CFR § 144.36(a).

APR 2 9 2008

If you have any questions on the enclosed Final Permit or Statement of Basis, please call Margo Smith of my staff at (303) 312-6318, or toll-free at (800) 227-8917, ext. 312-6318.

Sincerely,

Stephen S. Tuber

Assistant Regional Administrator

Office of Partnerships and Regulatory Assistance

enclosure:

Final UIC Permit

Statement of Basis

Form 7520-7 Application to Transfer Permit

Form 7520-11 Monitoring Report Form 7520-12 Well Rework Record

Form 7520-14 Plugging Plan

cc:

Curtis Cesspooch, Chairperson

Uintah & Ouray Business Committee

Ute Indian Tribe

Ronald Groves, Councilman

Uintah & Ouray Business Committee

Ute Indian Tribe

Irene Cuch, Vice-Chairwoman

Uintah & Ouray Business Committee

Ute Indian Tribe

Steven Cesspooch, Councilman

Uintah & Ouray Business Committee

Ute Indian Tribe

Phillip Chimburas, Councilman

Uintah & Ouray Business Committee

Ute Indian Tribe

Frances Poowegup, Councilwoman Uintah & Ouray Business Committee Ute Indian Tribe

Chester Mills, Superintendent ☐ BIA - Uintah & Ouray Indian Agency

Shawn Chapoose, Director Land Use Department Ute Indian Tribe

Gil Hunt Assistant Director Utah Division of Oil, Gas, and Mining

Fluid Minerals Engineering Office BLM - Vernal Office

Michael Guinn District Manager Newfield Production Company Myton, Utah

#### **\$EPA**

## UNDERGROUND INJECTION CONTROL PROGRAM PERMIT

PREPARED: February 2008

Permit No. UT21056-07130

Class II Enhanced Oil Recovery Injection Well

Federal 9-11-9-17 Uintah County, UT

Issued To

#### **Newfield Production Company**

1401 Seventeenth Street, Suite 1000 Denver, CO 80202

> RECEIVED APR 2 9 2008

DIV. OF OIL, GAS & MINING

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#### Part I. AUTHORIZATION TO CONSTRUCT AND OPERATE

Under the authority of the Safe Drinking Water Act and Underground Injection Control (UIC) Program regulations of the U. S. Environmental Protection Agency (EPA) codified at Title 40 of the Code of Federal Regulations (40 CFR) Parts 2, 124, 144, 146, and 147, and according to the terms of this Permit,

Newfield Production Company 1401 Seventeenth Street, Suite 1000 Denver, CO 80202

is authorized to construct and to operate the following Class II injection well or wells:

Federal 9-11-9-17 2038' FSL & 720' FEL, NESE S11, T9S, R17E Uintah County, UT

EPA regulates the injection of fluids into injection wells so that injection does not endanger underground sources of drinking water (USDWs). EPA UIC Permit conditions are based on authorities set forth at 40 CFR Parts 144 and 146, and address potential impacts to USDWs.

Under 40 CFR Part 144, Subpart D, certain conditions apply to all UIC Permits and may be incorporated either expressly or by reference. General permit conditions for which the content is mandatory and not subject to site-specific differences are not discussed in this document. Issuance of this Permit does not convey any property rights of any sort or any exclusive privilege, nor does it authorize injury to persons or property or invasion of other private rights, or any infringement of other Federal, State or local laws or regulations. (40 CFR §144.35) An EPA UIC Permit may be issued for the operating life of the injection well or project unless terminated for reasonable cause under 40 CFR §§144.39, 144.40 and 144.41, and may be reviewed at least once every five (5) years to determine if action is required under 40 CFR §144.36(a).

This Permit is issued for the life of the well(s) unless modified, revoked and reissued, or terminated under 40 CFR 144.39 or 144.40. This EPA Permit may be adopted, modified, revoked and reissued, or terminated if primary enforcement authority for a UIC Program is delegated to an Indian Tribe or State. Upon the effective date of delegation, reports, notifications, questions and other correspondence should be directed to the Indian Tribe or State Director.

Issue Date:	<u> </u>	Effective Date_	
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Stephen S. Tuber Assistant Regional Administrator\* Office of Partnerships and Regulatory Assistance

\*NOTE: The person holding this title is referred to as the "Director" throughout this Permit.

#### PART II. SPECIFIC PERMIT CONDITIONS

#### Section A. WELL CONSTRUCTION REQUIREMENTS

These requirements represent the approved minimum construction standards for well casing and cement, injection tubing, and packer.

Details of the approved well construction plan are incorporated into this Permit as APPENDIX A. Changes to the approved plan that may occur during construction must be approved by the Director prior to being physically incorporated.

#### 1. Casing and Cement.

The well or wells shall be cased and cemented to prevent the movement of fluids into or between underground sources of drinking water. The well casing and cement shall be designed for the life expectancy of the well and of the grade and size shown in APPENDIX A. Remedial cementing may be required if shown to be inadequate by cement bond log or other attempted demonstration of Part II (External) mechanical integrity.

A radioactive tracer survey may be required if the cement bond log does not demonstrate the minimum 18 feet of cement with 80% bond in the confining zone. The permittee shall submit a new CBL that shows the travel time curve. If the new CBL is not able to identify adequate casing cement of at least eighteen (18) feet of effective 80% bond index cement bond across the confining zone, the RTS will be required within a 180-day period following commencement of injection.

#### 2. Injection Tubing and Packer.

Injection tubing is required, and shall be run and set with a packer at or below the depth indicated in APPENDIX A. The packer setting depth may be changed provided it remains below the depth indicated in APPENDIX A and the Permittee provides notice and obtains the Director's approval for the change.

#### 3. Sampling and Monitoring Devices.

The Permittee shall install and maintain in good operating condition:

- (a) a "tap" at a conveniently accessible location on the injection flow line between the pump house or storage tanks and the injection well, isolated by shut-off valves, for collection of representative samples of the injected fluid; and
- (b) one-half (1/2) inch female iron pipe fitting, isolated by shut-off valves and located at the wellhead at a conveniently accessible location, for the attachment of a pressure gauge capable of monitoring pressures ranging from normal operating pressures up to the Maximum Allowable Injection Pressure specified in APPENDIX C:
  - (i) on the injection tubing; and
  - (ii) on the tubing-casing annulus (TCA); and

- (c) a pressure actuated shut-off device attached to the injection flow line set to shut-off the injection pump when or before the Maximum Allowable Injection Pressure (MAIP) specified in APPENDIX C is reached at the wellhead; and
- (d) a non-resettable cumulative volume recorder attached to the injection line.

#### 4. Well Logging and Testing

Well logging and testing requirements are found in APPENDIX B. The Permittee shall ensure the log and test requirements are performed within the time frames specified in APPENDIX B. Well logs and tests shall be performed according to current EPA-approved procedures. Well log and test results shall be submitted to the Director within sixty (60) days of completion of the logging or testing activity, and shall include a report describing the methods used during logging or testing and an interpretation of the test or log results.

#### 5. Postponement of Construction or Conversion

The Permittee shall complete well construction within one year of the Effective Date of the Permit, or in the case of an Area Permit within one year of Authorization of the additional well. Authorization to construct and operate shall expire if the well has not been constructed within one year of the Effective Date of the Permit or Authorization and the Permit may be terminated under 40 CFR 144.40, unless the Permittee has notified the Director and requested an extension prior to expiration. Notification shall be in writing, and shall state the reasons for the delay and provide an estimated completion date. Once Authorization has expired under this part, the complete permit process including opportunity for public comment may be required before Authorization to construct and operate may be reissued.

#### 6. Workovers and Alterations

Workovers and alterations shall meet all conditions of the Permit. Prior to beginning any addition or physical alteration to an injection well that may significantly affect the tubing, packer or casing, the Permittee shall give advance notice to the Director and obtain the Director's approval. The Permittee shall record all changes to well construction on a Well Rework Record (EPA Form 7520-12), and shall provide this and any other record of well workover, logging, or test data to EPA within sixty (60) days of completion of the activity.

A successful demonstration of Part I MI is required following the completion of any well workover or alteration which affects the casing, tubing, or packer. Injection operations shall not be resumed until the well has successfully demonstrated mechanical integrity and the Director has provided written approval to resume injection.

#### Section B. MECHANICAL INTEGRITY

The Permittee is required to ensure each injection well maintains mechanical integrity at all times. The Director, by written notice, may require the Permittee to comply with a schedule describing when mechanical integrity demonstrations shall be made.

An injection well has mechanical integrity if:

(a) There is no significant leak in the casing, tubing, or packer (Part I); and

(b) There is no significant fluid movement into an underground source of drinking water through vertical channels adjacent to the injection well bore (Part II).

#### 1. Demonstration of Mechanical Integrity (MI).

The operator shall demonstrate MI prior to commencing injection and periodically thereafter. Well-specific conditions dictate the methods and the frequency for demonstrating MI and are discussed in the Statement of Basis. The logs and tests are designed to demonstrate both internal (Part I) and external (Part II) MI as described above. The conditions present at this well site warrant the methods and frequency required in Appendix B of this Permit.

In addition to these regularly scheduled demonstrations of MI, the operator shall demonstrate internal (Part I) MI after any workover which affects the tubing, packer or casing.

The Director may require additional or alternative tests if the results presented by the operator are not satisfactory to the Director to demonstrate there is no movement of fluid into or between USDWs resulting from injection activity. Results of MI tests shall be submitted to the Director as soon as possible but no later than sixty (60) days after the test is complete.

The permittee shall demonstrate Part II MI by either 1) running and submitting a new CBL that shows the travel time curve, or 2) by conducting a Part II MI test using a Radioactive Tracer Survey (RTS) within a 180-day period following commencement of injection. Part II MI will be considered demonstrated 1) if the CBL results identify adequate casing cement of at least eighteen (18) feet of effective 80% bond index cement bond across the Confining Zone, or 2) if the RTS is able to demonstrate no fluid movement through vertical channels adjacent to the well bore. If the new CBL is not able to identify adequate casing cement of at least eighteen (18) feet of effective 80% bond index across the Confining Zone, the RTS will be required within a 180-day period following commencement of injection. If the RTS is used, a Part II MI demonstration, using a temperature log, noise log, or RTS is required at least once every five years thereafter.

#### 2. Mechanical Integrity Test Methods and Criteria

EPA-approved methods shall be used to demonstrate mechanical integrity. Ground Water Section Guidance No. 34 "Cement Bond Logging Techniques and Interpretation", Ground Water Section Guidance No. 37, "Demonstrating Part II (External) Mechanical Integrity for a Class II injection well permit", and Ground Water Section Guidance No. 39, "Pressure Testing Injection Wells for Part I (Internal) Mechanical Integrity" are available from EPA and will be provided upon request.

The Director may stipulate specific test methods and criteria best suited for a specific well construction and injection operation.

#### 3. Notification Prior to Testing.

The Permittee shall notify the Director at least 30 days prior to any scheduled mechanical integrity test. The Director may allow a shorter notification period if it would be sufficient to enable EPA to witness the mechanical integrity test. Notification may be in the form of a yearly or quarterly schedule of planned mechanical integrity tests, or it may be on an individual basis.

#### 4. Loss of Mechanical Integrity.

If the well fails to demonstrate mechanical integrity during a test, or a loss of mechanical integrity becomes evident during operation (such as presence of pressure in the TCA, water flowing at the surface, etc.), the Permittee shall notify the Director within 24 hours (see Part III Section E Paragraph 11(e) of this Permit) and the well shall be shut-in within 48 hours unless the Director requires immediate shut-in.

Within five days, the Permittee shall submit a follow-up written report that documents test results, repairs undertaken or a proposed remedial action plan.

Injection operations shall not be resumed until after the well has successfully been repaired and demonstrated mechanical integrity, and the Director has provided approval to resume injection.

#### Section C. WELL OPERATION

INJECTION BETWEEN THE OUTERMOST CASING PROTECTING UNDERGROUND SOURCES OF DRINKING WATER AND THE WELL BORE IS PROHIBITED.

Injection is approved under the following conditions:

#### 1. Requirements Prior to Commencing Injection.

Well injection, including for new wells authorized by an Area Permit under 40 CFR 144.33 (c), may commence only after all well construction and pre-injection requirements herein have been met and approved. The Permittee may not commence injection until construction is complete, and

- (a) The Permittee has submitted to the Director a notice of completion of construction and a completed EPA Form 7520-10 or 7520-12; all applicable logging and testing requirements of this Permit (see APPENDIX B) have been fulfilled and the records submitted to the Director; mechanical integrity pursuant to 40 CFR 146.8 and Part II Section B of this Permit has been demonstrated; and
  - (i) The Director has inspected or otherwise reviewed the new injection well and finds it is in compliance with the conditions of the Permit; or
  - (ii) The Permittee has not received notice from the Director of his or her intent to inspect or otherwise review the new injection well within 13 days of the date of the notice in Paragraph 1a, in which case prior inspection or review is waived and the Permittee may commence injection.

#### 2. Injection Interval.

Injection is permitted only within the approved injection interval, listed in APPENDIX C. Additional individual injection perforations may be added provided that they remain within the approved injection interval and the Permittee provides notice to the Director in accordance with Part II, Section A, Paragraph 6.

#### 3. Injection Pressure Limitation

- (a) The permitted Maximum Allowable Injection Pressure (MAIP), measured at the wellhead, is found in APPENDIX C. Injection pressure shall not exceed the amount the Director determines is appropriate to ensure that injection does not initiate new fractures or propagate existing fractures in the confining zone adjacent to USDWs. In no case shall injection pressure cause the movement of injection or formation fluids into a USDW.
- (b) The Permittee may request a change of the MAIP, or the MAIP may be increased or decreased by the Director in order to ensure that the requirements in Paragraph (a) above are fulfilled. The Permitee may be required to conduct a step rate injection test or other suitable test to provide information for determining the fracture pressure of the injection zone. Change of the permitted MAIP by the Director shall be by modification of this Permit and APPENDIX C.

#### 4. Injection Volume Limitation.

Injection volume is limited to the total volume specified in APPENDIX C.

#### 5. Injection Fluid Limitation.

Injected fluids are limited to those identified in 40 CFR 144.6(b)(2) as fluids used for enhanced recovery of oil or natural gas, including those which are brought to the surface in connection with conventional oil or natural gas production that may be commingled with waste waters from gas plants which are an integral part of production operations unless those waters are classified as a hazardous waste at the time of injection, pursuant to 40 CFR 144.6(b). Non-exempt wastes, including unused fracturing fluids or acids, gas plant cooling tower cleaning wastes, service wastes and vacuum truck wastes, are NOT approved for injection. This well is NOT approved for commercial brine injection, industrial waste fluid disposal or injection of hazardous waste as defined by CFR 40 Part 261. The Permittee shall provide a listing of the sources of injected fluids in accordance with the reporting requirements in Part II Section D Paragraph 4 and APPENDIX D of this Permit.

#### 6. Tubing-Casing Annulus (TCA)

The tubing-casing annulus (TCA) shall be filled with water treated with a corrosion inhibitor, or other fluid approved by the Director. The TCA valve shall remain closed during normal operating conditions and the TCA pressure shall be maintained at zero (0) psi.

If TCA pressure cannot be maintained at zero (0) psi, the Permittee shall follow the procedures in Ground Water Section Guidance No. 35 "Procedures to follow when excessive annular pressure is observed on a well."

#### Section D. MONITORING, RECORDKEEPING, AND REPORTING OF RESULTS

#### 1. Monitoring Parameters, Frequency, Records and Reports.

Monitoring parameters are specified in APPENDIX D. Pressure monitoring recordings shall be taken at the wellhead. The listed parameters are to be monitored, recorded and reported at the frequency indicated in APPENDIX D even during periods when the well is not operating.

Monitoring records must include:

- (a) the date, time, exact place and the results of the observation, sampling, measurement, or analysis, and;
- (b) the name of the individual(s) who performed the observation, sampling, measurement, or analysis, and:
- (c) the analytical techniques or methods used for analysis.

#### 2. Monitoring Methods.

- (a) Monitoring observations, measurements, samples, etc. taken for the purpose of complying with these requirements shall be representative of the activity or condition being monitored.
- (b) Methods used to monitor the nature of the injected fluids must comply with analytical methods cited and described in Table 1 of 40 CFR 136.3 or Appendix III of 40 CFR 261, or by other methods that have been approved in writing by the Director.
- (c) Injection pressure, annulus pressure, injection rate, and cumulative injected volumes shall be observed and recorded at the wellhead under normal operating conditions, and all parameters shall be observed simultaneously to provide a clear depiction of well operation.
- (d) Pressures are to be measured in pounds per square inch (psi).
- (e) Fluid volumes are to be measured in standard oil field barrels (bbl).
- (f) Fluid rates are to be measured in barrels per day (bbl/day).

#### 3. Records Retention.

- (a) Records of calibration and maintenance, and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit shall be retained for a period of AT LEAST THREE (3) YEARS from the date of the sample, measurement, report, or application. This period may be extended anytime prior to its expiration by request of the Director.
- (b) Records of the nature and composition of all injected fluids must be retained until three (3) years after the completion of any plugging and abandonment (P&A) procedures specified under 40 CFR 144.52(a)(6) or under Part 146 Subpart G, as appropriate. The Director may require the Permittee to deliver the records to the Director at the conclusion of the retention period. The Permittee shall continue to retain the records after the three (3) year retention period unless the Permittee delivers the records to the Director or obtains written approval from the Director to discard the records.
- (c) The Permittee shall retain records at the location designated in APPENDIX D.

#### 4. Annual Reports.

Whether the well is operating or not, the Permittee shall submit an Annual Report to the Director that summarizes the results of the monitoring required by Part II Section D and APPENDIX D.

The first Annual Report shall cover the period from the effective date of the Permit through December 31 of that year. Subsequent Annual Reports shall cover the period from January 1 through December 31 of the reporting year. Annual Reports shall be submitted by February 15 of the year following data collection. EPA Form 7520-11 may be copied and shall be used to submit the Annual Report, however, the monitoring requirements specified in this Permit are mandatory even if EPA Form 7520-11 indicates otherwise.

#### Section E. PLUGGING AND ABANDONMENT

#### 1. Notification of Well Abandonment, Conversion or Closure.

The Permittee shall notify the Director in writing at least forty-five (45) days prior to: 1) plugging and abandoning an injection well, 2) converting to a non-injection well, and 3) in the case of an Area Permit, before closure of the project.

#### 2. Well Plugging Requirements

Prior to abandonment, the injection well shall be plugged with cement in a manner which isolates the injection zone and prevents the movement of fluids into or between underground sources of drinking water, and in accordance with 40 CFR 146.10 and other applicable Federal, State or local law or regulations. Tubing, packer and other downhole apparatus shall be removed. Cement with additives such as accelerators and retarders that control or enhance cement properties may be used for plugs; however, volume-extending additives and gel cements are not approved for plug use. Plug placement shall be verified by tagging. Plugging gel of at least 9.6 lb/gal shall be placed between all plugs. A minimum 50 ft surface plug shall be set inside and outside of the surface casing to seal pathways for fluid migration into the subsurface. The Plugging Record must be certified as accurate and complete by the person responsible for the plugging operation. Prior to placement of the cement plug(s) the well shall be in a state of static equilibrium with the mud weight equalized top to bottom, either by circulating the mud in the well at least once or by a comparable method prescribed by the Director.

#### 3. Approved Plugging and Abandonment Plan.

The approved plugging and abandonment plan is incorporated into this Permit as APPENDIX E. Changes to the approved plugging and abandonment plan must be approved by the Director prior to beginning plugging operations. The Director also may require revision of the approved plugging and abandonment plan at any time prior to plugging the well.

#### 4. Forty Five (45) Day Notice of Plugging and Abandonment.

The Permittee shall notify the Director at least forty-five (45) days prior to plugging and abandoning a well and provide notice of any anticipated change to the approved plugging and abanonment plan.

#### 5. Plugging and Abandonment Report.

Within sixty (60) days after plugging a well, the Permittee shall submit a report (EPA Form 7520-13) to the Director. The plugging report shall be certified as accurate by the person who performed the plugging operation. Such report shall consist of either:

- (a) A statement that the well was plugged in accordance with the approved plugging and abandonment plan; or
- (b) Where actual plugging differed from the approved plugging and abandonment plan, an updated version of the plan, on the form supplied by the Director, specifying the differences.

#### 6. Inactive Wells.

After any period of two years during which there is no injection the Permittee shall plug and abandon the well in accordance with Part II Section E Paragraph 2 of this Permit unless the Permittee:

- (a) Provides written notice to the Director;
- (b) Describes the actions or procedures the Permittee will take to ensure that the well will not endanger USDWs during the period of inactivity. These actions and procedures shall include compliance with mechanical integrity demonstration, Financial Responsibility and all other permit requirements designed to protect USDWs; and
- (c) Receives written notice by the Director temporarily waiving plugging and abandonment requirements.

#### PART III. CONDITIONS APPLICABLE TO ALL PERMITS

#### Section A. EFFECT OF PERMIT

The Permittee is allowed to engage in underground injection in accordance with the conditions of this Permit. The Permittee shall not construct, operate, maintain, convert, plug, abandon, or conduct any other activity in a manner that allows the movement of fluid containing any contaminant into underground sources of drinking water, if the presence of that contaminant may cause a violation of any primary drinking water regulation under 40 CFR 142 or may otherwise adversely affect the health of persons. Any underground injection activity not authorized by this Permit or by rule is prohibited. Issuance of this Permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of any other Federal, State or local law or regulations. Compliance with the terms of this Permit does not constitute a defense to any enforcement action brought under the provisions of Section 1431 of the Safe Drinking Water Act (SDWA) or any other law governing protection of public health or the environment, for any imminent and substantial endangerment to human health or the environment, nor does it serve as a shield to the Permittee's independent obligation to comply with all UIC regulations. Nothing in this Permit relieves the Permittee of any duties under applicable regulations.

#### Section B. CHANGES TO PERMIT CONDITIONS

#### 1. Modification, Reissuance, or Termination.

The Director may, for cause or upon a request from the Permittee, modify, revoke and reissue, or terminate this Permit in accordance with 40 CFR 124.5, 144.12, 144.39, and 144.40. Also, this Permit is subject to minor modification for causes as specified in 40 CFR 144.41. The filing of a request for modification, revocation and reissuance, termination, or the notification of planned changes or anticipated noncompliance on the part of the Permittee does not stay the applicability or enforceability of any condition of this Permit.

#### 2. Conversions.

The Director may, for cause or upon a written request from the Permittee, allow conversion of the well from a Class II injection well to a non-Class II well. Conversion may not proceed until the Permittee receives written approval from the Director. Conditions of such conversion may include but are not limited to, approval of the proposed well rework, follow up demonstration of mechanical integrity, well-specific monitoring and reporting following the conversion, and demonstration of practical use of the converted configuration.

#### 3. Transfer of Permit.

Under 40 CFR 144.38, this Permit is transferable provided the current Permittee notifies the Director at least thirty (30) days in advance of the proposed transfer date (EPA Form 7520-7) and provides a written agreement between the existing and new Permittees containing a specific date for transfer of Permit responsibility, coverage and liability between them. The notice shall adequately demonstrate that the financial responsibility requirements of 40 CFR 144.52(a)(7) will be met by the new Permittee. The Director may require modification or revocation and reissuance of the Permit to change the name of the Permittee and incorporate such other requirements as may be necessary under the Safe Drinking Water Act; in some cases, modification or revocation and reissuance is mandatory.

#### 4. Permittee Change of Address.

Upon the Permittee's change of address, or whenever the operator changes the address where monitoring records are kept, the Permittee must provide written notice to the Director within 30 days.

#### 5. Construction Changes, Workovers, Logging and Testing Data

The Permittee shall give advance notice to the Director, and shall obtain the Director's written approval prior to any physical alterations or additions to the permitted facility. Alterations or workovers shall meet all conditions as set forth in this permit. The Permittee shall record any changes to the well construction on a Well Rework Record (EPA Form 7520-12), and shall provide this and any other record of well workovers, logging, or test data to EPA within sixty (60) days of completion of the activity.

Following the completion of any well workovers or alterations which affect the casing, tubing, or packer, a successful demonstration of mechanical integrity (Part III, Section F of this Permit) shall be made, and written authorization from the Director received, prior to resuming injection activities.

#### Section C. SEVERABILITY

The Provisions of this Permit are severable, and if any provision of this Permit or the application of any provision of this Permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Permit shall not be affected thereby.

#### Section D. CONFIDENTIALITY

In accordance with 40 CFR Part 2 and 40 CFR 144.5, information submitted to EPA pursuant to this Permit may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, EPA may make the information available to the public without further notice. If a claim is asserted, the validity of the claim will be assessed in accordance with the procedures in 40 CFR Part 2 (Public Information). Claims of confidentiality for the following information will be denied:

- The name and address of the Permittee, and
- information which deals with the existence, absence or level of contaminants in drinking water.

#### Section E. GENERAL PERMIT REQUIREMENTS

#### 1. Duty to Comply.

The Permittee must comply with all conditions of this Permit. Any noncompliance constitutes a violation of the Safe Drinking Water Act (SDWA) and is grounds for enforcement action; for Permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application; except that the Permittee need not comply with the provisions of this Permit to the extent and for the duration such noncompliance is authorized in an emergency permit under 40 CFR 144.34. All violations of the SDWA may subject the Permittee to penalties and/or criminal prosecution as specified in Section 1423 of the SDWA.

#### 2. Duty to Reapply.

If the Permittee wishes to continue an activity regulated by this Permit after the expiration date of this Permit, under 40 CFR 144.37 the Permittee must apply for a new permit prior to the expiration date.

#### 3. Need to Halt or Reduce Activity Not a Defense.

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Permit.

#### 4. Duty to Mitigate.

The Permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this Permit.

#### 5. Proper Operation and Maintenance.

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this Permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this Permit.

#### 6. Permit Actions.

This Permit may be modified, revoked and reissued or teminated for cause. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

#### 7. Property Rights.

This Permit does not convey any property rights of any sort, or any exclusive privilege.

#### 8. Duty to Provide Information.

The Permittee shall furnish to the Director, within a time specified, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Director, upon request, copies of records required to be kept by this Permit. The Permittee is required to submit any information required by this Permit or by the Director to the mailing address designated in writing by the Director.

#### 9. Inspection and Entry.

The Permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

(a) Enter upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Permit;

- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Permit;
- (c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit; and,
- (d) Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the SDWA, any substances or parameters at any location.

#### 10. Signatory Requirements.

All applications, reports or other information submitted to the Director shall be signed and certified according to 40 CFR 144.32. This section explains the requirements for persons duly authorized to sign documents, and provides wording for required certification.

#### 11. Reporting Requirements.

- (a) Planned changes. The Permittee shall give notice to the Director as soon as possible of any planned changes, physical alterations or additions to the permitted facility, and prior to commencing such changes.
- (b) Anticipated noncompliance. The Permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- (c) Monitoring Reports. Monitoring results shall be reported at the intervals specified in this Permit.
- (d) Compliance schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Permit shall be submitted no later than 30 days following each schedule date.
- (e) Twenty-four hour reporting. The Permittee shall report to the Director any noncompliance which may endanger human health or the environment, including:
  - (i) Any monitoring or other information which indicates that any contaminant may cause endangerment to a USDW; or
  - (ii) Any noncompliance with a permit condition or malfunction of the injection system which may cause fluid migration into or between USDWs.

Information shall be provided, either directly or by leaving a message, within twenty-four (24) hours from the time the permittee becomes aware of the circumstances by telephoning (800) 227-8917 and requesting EPA Region VIII UIC Program Compliance and Technical Enforcement Director, or by contacting the EPA Region VIII Emergency Operations Center at (303) 293-1788.

In addition, a follow up written report shall be provided to the Director within five (5) days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause, the period of noncompliance including exact dates and times, and if the noncompliance has not been corrected the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

- (f) Oil Spill and Chemical Release Reporting: The Permittee shall comply with all reporting requirements related to the occurence of oil spills and chemical releases by contacting the National Response Center (NRC) at (800) 424-8802, (202) 267-2675, or through the NRC website http://www.nrc.uscg.mil/index.htm.
- (g) Other Noncompliance. The Permittee shall report all instances of noncompliance not reported under paragraphs Part III, Section E Paragraph 11(b) or Section E, Paragraph 11(e) at the time the monitoring reports are submitted. The reports shall contain the information listed in Paragraph 11(e) of this Section.
- (h) Other information. Where the Permittee becomes aware that it failed to submit any relevant facts in the permit application, or submitted incorrect information in a permit application or in any report to the Director, the Permittee shall promptly submit such facts or information to the Director.

#### Section F. FINANCIAL RESPONSIBILITY

#### 1. Method of Providing Financial Responsibility.

The Permittee shall maintain continuous compliance with the requirement to maintain financial responsibility and resources to close, plug, and abandon the underground injection well(s). No substitution of a demonstration of financial responsibility shall become effective until the Permittee receives written notification from the Director that the alternative demonstration of financial responsibility is acceptable. The Director may, on a periodic basis, require the holder of a permit to revise the estimate of the resources needed to plug and abandon the well to reflect changes in such costs and may require the Permittee to provide a revised demonstration of financial responsibility.

#### 2. Insolvency.

In the event of:

- (a) the bankruptcy of the trustee or issuing institution of the financial mechanism; or
- (b) suspension or revocation of the authority of the trustee institution to act as trustee; or

(c) the institution issuing the financial mechanism losing its authority to issue such an instrument

the Permittee must notify the Director in writing, within ten (10) business days, and the Permittee must establish other financial assurance or liability coverage acceptable to the Director within sixty (60) days after any event specified in (a), (b), or (c) above.

The Permittee must also notify the Director by certified mail of the commencement of voluntary or involuntary proceedings under Title 11 (Bankruptcy), U.S. Code naming the owner or operator as debtor, within ten (10) business days after the commencement of the proceeding. A guarantor, if named as debtor of a corporate guarantee, must make such a notification as required under the terms of the guarantee.

#### **APPENDIX A**

#### **WELL CONSTRUCTION REQUIREMENTS**

#### See diagram.

#### **FORMATION DATA:**

- \* Base of USDWs: Top of Green River Formation at 1,221'.
- \* Confining Zone: Green River Formation interval between 3,438' 3,527'.
- \* Permitted Injection Zone: Green River Formation interval between 3,527' 5,839'.
- \* Original Authorized Injection perforations: 4,528' 5,560'.

#### WELL CONSTRUCTION:

- \* 8-5/8" 24# Surface casing in 12-1/4" hole to 297' with 150 sx cement.
- \* 5-1/2" 15.5# Longstring casing in 7-7/8" hole to 5,792' with 660 sx cement.
- \* Perforations: Green River G-1 zone from 4,528' 5,560'
- \* 2-7/8" injection tubing set in a packer at 4,493'
- \* Well TD at 5,800'
- \* The well construction schematic diagram identifies the production perforations in the Douglas Creek Member, which will be utilized during enhanced recovery injection. Additional perforations may be added at a later time between the depths of 3,527' and the top of the Wasatch Formation (estimated to be 5,839'), provided that the operator first notifies the Director and later submits an updated well completion report (EPA form 7520-12) and schematic diagram.

#### WELLHEAD EQUIPMENT:

- \* Sampling tap located to enable sampling fluid in the injection tubing.
- \* Sampling tap located to enable sampling fluid in the 5-1/2" x 7 7/8" annulus.
- \* Pressure gauge isolated by 1/2" FIP shut-off valve or quick-connect and located to enable reading the pressure on the injection tubing.
- \* Pressure gauge isolated by 1/2" FIP shut-off valve or quick-connect and located to enable reading the pressure in the 5-1/2 x 7 7/8" annulus.
- \* Pressure-actuated shut off device located on the injection line, and set to prevent injection operations from exceeding the maximum allowable injection pressure.
- \* Non-resettable cumulative volume recorder located on the injection line.
- \* The packer shall be set no higher than 100 feet above the top perforation.

#### UT 31056-07130 FEDERAL #9-11-9-17 Spud Date, 8:03/04 Initial Production: BOPD, Put on Production: 10/20/04 Proposed Injection MCFD, BWPD Wellhore Diagram GL: 508T KB: 50933 FRAC JOB SURFACE CASING 10/14/04 | 5497-55601 Frac CP3 & 4 sands as follows: CSG SIZE: 8 5/8 33,2625's 20/40 sand in 353 lbbs Lightning Frac 17 fluid. Treated 46 avg press of 1327 psi GRADE: J-55 عد ۲<u>۵۵۷) اوا</u> w/avg rate of 24.7 RPM, ISIP 1500, Cale flush 5495 gal. Actual flush: 5536 gal WEIGHT 24# LENGTH: 7 jts. (287.15°) 10/14/04 5373-5416 Frac CPL & 2 sands as follows Coment Top at 310 Frac CCC & 2 sands as follows: 40,0368 20/40 sand in 37x bbls Lightning Frac 17 third. Treated @ avg press of 1026 psi w/avg rate of 24.8 BPM, ISIP 1500 psi, Cale third; 5371 gal. Actual flush; 5368 gal. DEPTH LANDED: 297.15' KB HOLE SIZE, 12 1/4" CEMENT DATA: 150sxs Class "G" mixed ont 10/14/04 4917-4962 43,898# 20/40 sand in 400 bbls lightning Frac 1321 Green River 17 fluid, Treated (it) avg press of 1400 psi w/avg rate of 24.8 BPM, ISIP 2100 psi Calc PRODUCTION CASING thish: 4915 gal. Actual thish: 4956 gal. CSG SIZE: 5 1/2" TO CYEPA - 1322' 10/15/04 4772-4810 GRADE: J-55 Frac B2 sands as follo 59,5687 20/40 sand in 469 bils lightning Frac 17 fluid. Treated @ avg press of 1592 psi w/avg rate of 24.8 BPM, ISIP 2100 psi, Calc WEIGHT: 15.5# 3310, Linear LENGTH: 137 jts. (5794.16°) flush: 4770 gal. Actual flush: 4410 gal. 2742' mahagany Bend-DEPTH LANDED: 5792.16" KB HOLE SIZE: 7 7/8" Frac D2 & J sands as follows 103.302# 20/40 sand in 711 bbls lightning Frue 17 fluid. Treated @ avg press of 1667 psi Wavg rate of 24.8 BPM, ISIP 2000 psi, Cale CEMENT DATA: 285 sxs Prom. Lite II mixed & 375 sxs 50/50 POZ mix. 3438 Upper Goesen River The CEMENT TOP AT: 310 flush: 4526 gal. Actual thish; 4414 gal. ~ 33681-3872 TUBING SIZE/GRADE/WT.; 2 7/877 J-557 6,58 NO, OF JOINTS: 170 jts (5511.18°) 15/15-,1558 TUBING ANCHOR: 5523.18" KB 4575-4585 NO, OF JOINTS: 1 jis (32,51') SEATING NIPPLE: 2 7/8" (1,10°) SN LANDED AT: 5558.49° KB NO OF JOINTS: 2 jts. (65,051) 4772-4778 TOTAL STRING LENGTH: EOT & 5625.09' w/ 12' KB 4788-1791 4917-4926 4935-1940 4051-40621 5373-53761 PERFORATION RECORD 555.1-55mg 10/11/04 2 1 boles 10/11-04 10/11/04 24 holes to-holes 10/14/04 5-11 n= 5-12ti USPF to holes 10°1 1′04 10°1 1 0 1 \$400-\$408° \$373-\$376 4.18PF 32 holes 12 holes 10 14-04 1951- Po2 JUSPE 14 boles 555 1-5560 10:14:04 10:14:04 1935-3930 USPE 12 holes 4802-4815 4788-4794 10 14.04 LISPA C' hole 5714 Basel Carbon 16 [ 1 0 1 OSPI Li lade NEWFIELD 1772-4778\* 1575-1585\* 1548-1558\* Top of Fill & PETD to 55% 10.1 104 LISPE 2 Harles SHOE at 5 of 10.15/04 1.7SPF 10 holes 1528/1530 Federal 9-11-9-17

UT21056 - 07130\_constr.bmp

METERALIS

-5839 Weed & (col.)

2038° FSL & 720° FEL NF SE Section 11-T98-R17E

Uintah Co, Utah

VPL:434047-35158; Lense - UTU-075174

#### APPENDIX B

#### LOGGING AND TESTING REQUIREMENTS

#### Logs.

Logs will be conducted according to current UIC guidance. It is the responsibility of the Permittee to obtain and use guidance prior to conducting any well logging required as a condition of this permit.

WELL NAME: Federal 9-11-9-17	
TYPE OF LOG	DATE DUE
CBL/VDL/GAMMA RAY	Prior to receiving authorization to begin injection.

#### Tests.

Tests will be conducted according to current UIC guidance. It is the responsibility of the Permittee to obtain and use guidance prior to conducting any well test required as a condition of this permit.

TYPE OF TEST	DATE DUE
Radioactive Tracer Survey (2)	Within a 180-day period following the commencement of injection and at least once every five (5) years following the last successful test.
Standard Annulus Pressure	Prior to receiving authorization to inject and at least once every five (5) years after the last successful demonstration of Part I mechanical integrity
Pore Pressure	Prior to receiving authorization to begin injection

#### **APPENDIX C**

#### **OPERATING REQUIREMENTS**

#### **MAXIMUM ALLOWABLE INJECTION PRESSURE:**

Maximum Allowable Injection Pressure (MAIP) as measured at the surface shall not exceed the pressure(s) listed below.

	MAXIMUM ALLOWED INJECTION PRESSURE (psi)
WELL NAME	 ZONE 1 (Upper)
Federal 9-11-9-17	1,175

#### **INJECTION INTERVAL(S):**

Injection is permitted only within the approved injection interval listed below. Injection perforations may be altered provided they remain within the approved injection interval and the Permittee provides notice to the Director in accordance with Part II, Section A, Paragraph 6. Specific injection perforations can be found in Appendix A.

WELL NAME: Federal 9-11-9-17				
APPRO		O INJECTION AL (KB, ft)	FRACTURE GRADIENT	
FORMATION NAME	TOP	BOTTOM	(psi/ft)	
Green River	3,527.00	- 5,839.00	0.700	

#### **ANNULUS PRESSURE:**

The annulus pressure shall be maintained at zero (0) psi as measured at the wellhead. If this pressure cannot be maintained, the Permittee shall follow the procedures listed under Part II, Section C. 6. of this permit.

#### **MAXIMUM INJECTION VOLUME:**

There is no limitation on the number of barrels per day (bbls/day) of water that shall be injected into this well, provided further that in no case shall injection pressure exceed that limit shown in Appendix C.

#### APPENDIX D

#### MONITORING AND REPORTING PARAMETERS

This is a listing of the parameters required to be observed, recorded, and reported. Refer to the permit Part II, Section D, for detailed requirements for observing, recording, and reporting these parameters.

OBSERVE	MONTHLY AND RECORD AT LEAST ONCE EVERY THIRTY DAYS
OBSERVE AND RECORD	Injection pressure (psig)
	Annulus pressure(s) (psig)
	Injection rate (bbl/day)
	Fluid volume injected since the well began injecting (bbls)

To the state	ANNUALLY	
ANALYZE	Injected fluid total dissolved solids (mg/l)	
	Injected fluid specific gravity	
	Injected fluid specific conductivity	
	Injected fluid pH	

100	ANNUALLY
REPORT	Each month's maximum and averaged injection pressures (psig)
	Each month's maximum and minimum annulus pressure(s) (psig)
	Each month's injected volume (bbl)
	Fluid volume injected since the well began injecting (bbl)
	Written results of annual injected fluid analysis
	Sources of all fluids injected during the year

Records of all monitoring activities must be retained and made available for inspection at the following location:

10530 S. County Road #33

Myton, UT 84052

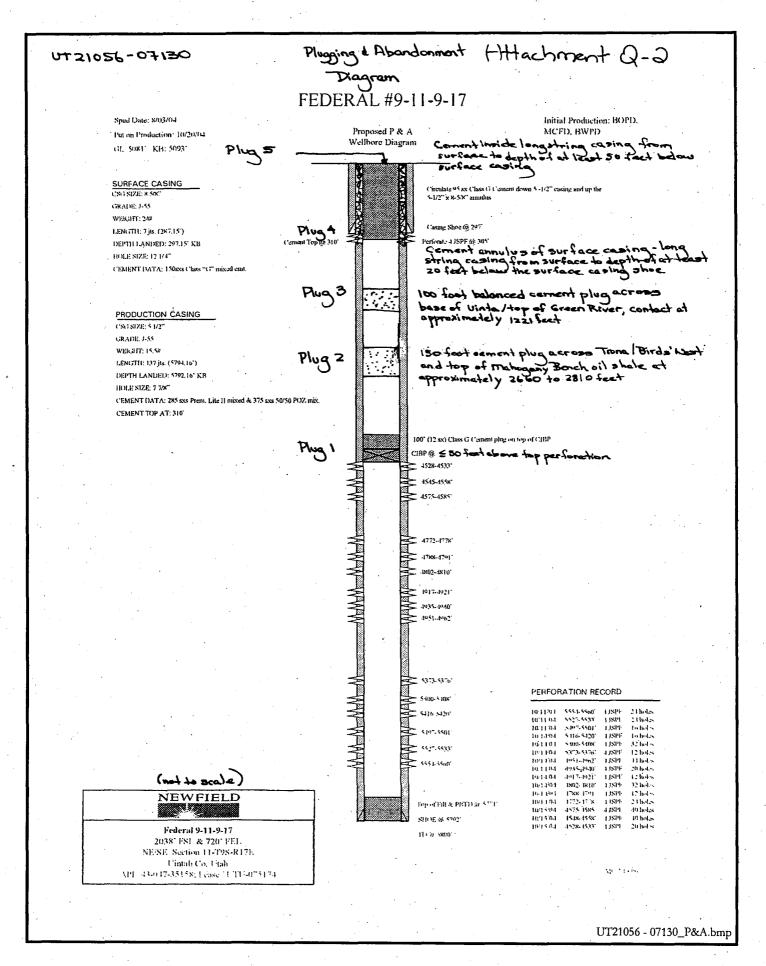
#### **APPENDIX E**

#### PLUGGING AND ABANDONMENT REQUIREMENTS

#### See diagram.

The well shall be plugged in a manner that isolates the injection zone and prevents movement of fluids into or between USDWs, and in compliance with other federal, state and local regulations. Tubing, packer and other downhole apparatus shall be removed. Cement with additives such as accelerators and retarders that control or enhance cement properties may be used for plugs; however, volume-extending additives and gel cements are not approved for plug use. Plug placement shall be verified by tagging. Plugging gel of at least 9.2 lb/gal shall be placed between all plugs. A minimum 50 ft surface plug shall be set inside and outside of the surface casing to seal pathways for fluid migration into the subsurface. Within sixty (60) days after plugging the owner or operator shall submit Plugging Record (EPA Form 7520-13) to the Director. The Plugging Record must be certified as accurate and complete by the person responsible for the plugging operation. At a minimum, the following plugs are required:

- PLUG 1: Remove tubing from the well, perform necessary clean out, and displace fluid in well with 9.2 lb. plugging gel or bentonite. Set a cast iron bridge plug (CIBP) no more than 50 ft above the top perforation with a minimum 20 ft cement plug on top of the CIBP.
- PLUG 2: Set a minimum 150 ft cement plug from approximately 2,660 to 2,810 ft. Use of a balanced cement plug is approved for this plug.
- PLUG 3: Set a minimum 100 ft cement plug across the base of the Uinta Formation at 1,221 ft. Use of a balanced cement plug is approved for this plug.
- PLUG 4: Seal pathways for fluid migration into the subsurface from the surface by, at a minimum, cementing the annulus of the surface casing-long string casing from surface to a depth of at least 20 ft below the surface casing shoe. If necessary, perforate the long string casing below the surface casing shoe.
- PLUG 5: Seal pathways for fluid migration into the subsurface from the surface by, at a minimum, cementing the inside of the long string casing from surface to a depth of at least 50 ft.



## **APPENDIX F**

## **CORRECTIVE ACTION REQUIREMENTS**

No corrective action is deemed necessary for this project.

## TABLE 3.1 WELL CONSTRUCTION REQUIREMENTS

Federal 9-11-9-17

Casing Type	Hole Size (in)	Casing Size (in)	Cased Interval (ft)	Cemented Interval (ft)
tubing		2.88	0 - 5,625	<u>-</u>
long string	7.88	5.50	0 - 5,792	310 - 5,792
surface	12.25	8.63	0 - 297	0 - 297

The approved well completion plan will be incorporated into the Permit as APPENDIX A and will be binding on the Permittee. Modification of the approved plan is allowed under 40 CFR 144.52(a)(1) provided written approval is obtained from the Director prior to actual modification.

## Casing and Cementing (TABLE 3.1)

The well construction plan was evaluated and determined to be in conformance with standard practices and guidelines that ensure well injection does not result in the movement of fluids into USDWs. Well construction details for this "new" injection well is shown in TABLE 3.1.

Remedial cementing may be required if the casing cement is shown to be inadequate by cement bond log or other demonstration of Part II (External) mechanical integrity.

## **Tubing and Packer**

Injection tubing is required to be installed from a packer up to the surface inside the well casing. The packer will be set above the uppermost perforation. The tubing and packer are designed to prevent injection fluid from coming into contact with the outermost casing.

The packer will be set no higher than 100 feet above the top perforation.

## **Tubing-Casing Annulus (TCA)**

The TCA allows the casing, tubing and packer to be pressure-tested periodically for mechanical integrity, and will allow for detection of leaks. The TCA will be filled with fresh water treated with a corrosion inhibitor or other fluid approved by the Director.

The tubing/casing annulus must be kept closed at all times so that it can be monitored as required under the conditions of the Permit.

#### **Monitoring Devices**

The permittee will be required to install and maintain wellhead equipment that allows for monitoring pressures and providing access for sampling the injected fluid. Required equipment may include but is not limited to: 1) shut-off valves located at the wellhead on the injection tubing and on the TCA; 2) a flow meter that measures the cumulative volume of injected fluid; 3) fittings or pressure gauges attached to the injection tubing and the TCA for monitoring the injection and TCA pressure; and 4) a tap on the injection line, isolated by shut-off valves, for sampling the injected fluid.

All sampling and measurement taken for monitoring must be representative of the monitored activity.

PART IV. Area of Review, Corrective Action Plan (40 CFR 144.55)

	AOR ANI	TABLE 4.1 D CORRECTIVE A	CTION		
Well Name	Туре	Status (Abandoned Y/N)	· Total Depth (ft)	TOC Depth (ft)	CAP Required (Y/N)
Federal 10-11-9-17	Producer	No	5,760	150	No
Federal 12-12-9-17	Producer	No	5,820	170	No
Federal 16-11-9-17	Producer	No	5,737	120	No
Federal 8-11-9-17	Producer	No	5,780	70	No

TABLE 4.1 lists the wells in the Area of Review ("AOR") and shows the well type, operating status, depth, top of casing cement ("TOC") and whether a Corrective Action Plan ("CAP") is required for the well.

#### **Area Of Review**

Applicants for Class I, II (other than "existing" wells) or III injection well Permits are required to identify the location of all known wells within the injection well's Area of Review (AOR) which penetrate the injection zone, or in the case of Class II wells operating over the fracture pressure of the formation, all known wells within the area of review that penetrate formations which may be affected by increased pressure. Under 40 CFR 146.6 the AOR may be a fixed radius of not less than one quarter (1/4) mile or a calculated zone of endangering influence. For Area Permits, a fixed width of not less than one quarter (1/4) mile for the circumscribing area may be used.

## **Corrective Action Plan**

For wells in the AOR which are improperly sealed, completed, or abandoned, the applicant shall develop a Corrective Action Plan (CAP) consisting of the steps or modifications that are necessary to prevent movement of fluid into USDWs.

The CAP will be incorporated into the Permit as APPENDIX F and become binding on the permittee.

## PART V. Well Operation Requirements (40 CFR 146.23)

INJEC	TABLE 5.1 TION ZONE PRESSU	RES	· · · · · · · · · · · · · · · · · · ·
	Federal 9-11-9-17		•
Formation Name	Depth Used to Calculate MAIP (ft)	Fracture Gradient (psi/ft)	Initial MAIP (psi)
Green River	4,528	0.700	1,175

## **Approved Injection Fluid**

The approved injection fluid is limited to Class II injection well fluids pursuant to 40 CFR § 144.6(b). For disposal wells injecting water brought to the surface in connection with natural gas storage operations, or conventional oil or natural gas production, the fluid may be commingled and the well used to inject other Class II wastes such as drilling fluids and spent well completion, treatment and stimulation fluid. Injection of non-exempt wastes, including unused fracturing fluids or acids, gas plant cooling tower cleaning wastes, service wastes, and vacuum truck and drum rinsate from trucks and drums transporting or containing non-exempt waste, is prohibited.

## **Injection Pressure Limitation**

Injection pressure, measured at the wellhead, shall not exceed a maximum calculated to assure that the pressure used during injection does not initiate new fractures or propagate existing fractures in the confining zones adjacent to the USDWs.

The applicant submitted injection fluid density and injection zone data which was used to calculate a formation fracture pressure and to determine the maximum allowable injection pressure (MAIP), as measured at the surface, for this Permit.

TABLE 5.1 lists the fracture gradient for the injection zone and the approved MAIP, determined according to the following formula:

$$FP = [fg - (0.433 * sg)] * d$$

FP = formation fracture pressure (measured at surface)

fg = fracture gradient (from submitted data or tests)

sg = specific gravity (of injected fluid)

d = depth to top of injection zone (or top perforation)

#### **Injection Volume Limitation**

Cumulative injected fluid volume limits are set to assure that injected fluids remain within the boundary of the exempted area. Cumulative injected fluid volume is limited when injection occurs into an aquifer that has been exempted from protection as a USDW.

There will be no restrictions on the cumulative volume of the authorized fluid injected into the Green River interval 3,527 feet to the top of the Wasatch Formation which is estimated to be at a depth of 5,839 feet KB.

## Mechanical Integrity (40 CFR 146.8)

An injection well has mechanical integrity if:

- 1. there is no significant leak in the casing, tubing, or packer (Part I); and
- 2. there is no significant fluid movement into a USDW through vertical channels adjacent to the injection well bore (Part II).

The Permit prohibits injection into a well which lacks mechanical integrity.

The Permit requires that the well demonstrate mechanical integrity prior to injection and periodically thereafter. A demonstration of mechanical integrity includes both internal (Part I) and external (Part II). The methods and frequency for demonstrating Part I and Part II mechanical integrity are dependent upon well-specific conditions as explained below.

## PART VI. Monitoring, Recordkeeping and Reporting Requirements

## **Injection Well Monitoring Program**

At least once a year the permittee must analyze a sample of the injected fluid for total dissolved solids (TDS), specific conductivity, pH, and specific gravity. This analysis shall be reported to EPA annually as part of the Annual Report to the Director. Any time a new source of injected fluid is added, a fluid analysis shall be made of the new source.

Instantaneous injection pressure, injection flow rate, cumulative fluid volume and TCA pressures must be observed on a weekly basis. A recording, at least once every thirty (30) days, must be made of the injection pressure, annulus pressure, monthly injection flow rate and cumulative fluid volume. This information is required to be reported annually as part of the Annual Report to the Director.

## PART VII. Plugging and Abandonment Requirements (40 CFR 146.10)

## **Plugging and Abandonment Plan**

Prior to abandonment, the well shall be plugged in a manner that isolates the injection zone and prevents movement of fluid into or between USDWs, and in accordance with any applicable Federal, State or local law or regulation. Tubing, packer and other downhole apparatus shall be removed. Cement with additives such as accelerators and retarders that control or enhance cement properties may be used for plugs; however, volume-extending additives and gel cements are not approved for plug use. Plug placement shall be verified by tagging. Plugging gel of at least 9.6 lb/gal shall be placed between all plugs. A minimum 50 ft surface plug shall be set inside and outside of the surface casing to seal pathways for fluid migration into the subsurface. Within sixty (60) days after plugging the owner or operator shall submit Plugging Record (EPA Form 7520 13) to the Director. The Plugging Record must be certified as accurate and complete by the person responsible for the plugging operation. The plugging and abandonment plan is described in Appendix E of the Permit.

## PART VIII. Financial Responsibility (40 CFR 144.52)

#### **Demonstration of Financial Responsibility**

The permittee is required to maintain financial responsibility and resources to close, plug, and abandon the underground injection operation in a manner prescribed by the Director. The

permittee shall show evidence of such financial responsibility to the Director by the submission of a surety bond, or other adequate assurance such as financial statements or other materials acceptable to the Director. The Regional Administrator may, on a periodic basis, require the holder of a lifetime permit to submit a revised estimate of the resources needed to plug and abandon the well to reflect inflation of such costs, and a revised demonstration of financial responsibility if necessary. Initially, the operator has chosen to demonstrate financial responsibility with:

Financial Statement, received April 22, 2005

Evidence of continuing financial responsibility is required to be submitted to the Director annually.

## STATEMENT OF BASIS

## NEWFIELD PRODUCTION COMPANY FEDERAL 9-11-9-17 UINTAH COUNTY, UT

## **EPA PERMIT NO. UT21056-07130**

**CONTACT:** Margo Smith

U. S. Environmental Protection Agency Ground Water Program, 8P-W-GW

1595 Wynkoop Street

Denver, Colorado 80202-1129

Telephone: 1-800-227-8917 ext. 312-6318

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DIV. OF OIL, GAS & MINING

This STATEMENT OF BASIS gives the derivation of site-specific UIC Permit conditions and reasons for them. Referenced sections and conditions correspond to sections and conditions in the Permit.

EPA UIC permits regulate the injection of fluids into underground injection wells so that the injection does not endanger underground sources of drinking water. EPA UIC permit conditions are based upon the authorities set forth in regulatory provisions at 40 CFR Parts 144 and 146, and address potential impacts to underground sources of drinking water. Under 40 CFR 144.35 Issuance of this permit does not convey any property rights of any sort or any exclusive privilege, nor authorize injury to persons or property of invasion of other private rights, or any infringement of other Federal, State or local laws or regulations. Under 40 CFR 144 Subpart D, certain conditions apply to all UIC Permits and may be incorporated either expressly or by reference. General Permit conditions for which the content is mandatory and not subject to site-specific differences (40 CFR Parts 144, 146 and 147) are not discussed in this document.

Upon the Effective Date when issued, the Permit authorizes the construction and operation of injection wells so that the injection does not endanger underground sources of drinking water, governed by the conditions specified in the Permit. The Permit is issued for the operating life of the injection well or project unless terminated for reasonable cause under 40 CFR 144.39, 144.40 and 144.41. The Permit is subject to EPA review at least once every five (5) years to determine if action is required under 40 CFR 144.36(a).

## PART I. General Information and Description of Facility

Newfield Production Company 1401 Seventeenth Street, Suite 1000 Denver, CO 80202

on

February 21, 2006

submitted an application for an Underground Injection Control (UIC) Program Permit or Permit Modification for the following injection well or wells:

Federal 9-11-9-17 2038' FSL & 720' FEL, NESE S11, T9S, R17E Uintah County, UT

Regulations specific to Uintah-Ouray Indian Reservation injection wells are found at 40 CFR 147 Subpart TT.

The application, including the required information and data necessary to issue or modify a UIC Permit in accordance with 40 CFR Parts 144, 146 and 147, was reviewed and determined by EPA to be complete.

The Permit will expire upon delegation of primary enforcement responsibility (primacy) for applicable portions of the UIC Program to the Ute Indian Tribe or the State of Utah unless the delegated agency has the authority and chooses to adopt and enforce this Permit as a Tribal or State Permit.

TABLE 1.1 shows the status of the well or wells as "New", "Existing", or "Conversion" and for Existing shows the original date of injection operation. Well authorization "by rule" under 40 CFR Part 144 Subpart C expires automatically on the Effective Date of an issued UIC Permit.

The Federal 9-11-9-17 is currently a Green River Formation (Douglas Creek member) producing oil well. The applicant intends to convert this facility to an enhanced recovery injection well.

# TABLE 1.1 WELL STATUS / DATE OF OPERATION NEW WELLS Well Name Well Status Date of Operation Federal 9-11-9-17 New N/A

PART II. Permit Considerations (40 CFR 146.24)

## **Hydrogeologic Setting**

Water wells for domestic supply in this area, when present, generally are completed into the shallow alluvium, the Duchesne River Formation, or the underlying Uinta Formation, and the water generally contains approximately 500 to 1,500 mg/l and higher total dissolved solids.

The Uinta-Animas aguifer in the Uinta Basin is present in water-yielding beds of sandstone. conglomerate, and siltstone of the Duchesne River and Uinta Formations, the Renegade Tonque of the Wasatch Formation, and the Douglas Creek Member of the Green River Formation. The Renegade Tongue of the Wasatch Formation and the Douglas Creek Member of the Green River Formation contain an aquifer along the southern and eastern margins of the basin where the rocks primarily consist of fluvial, massive, irregularly bedded sandstone and siltstone. Water-yielding units in the Uinta-Animas aquifer in the Uinta Basin commonly are separated from each other and from the underlying Mesaverde aquifer by units of low permeability composed of claystone, shale, maristone, or limestone. In the Uinta Basin, for example, the part of the aquifer in the Duchesne River and Uinta Formations ranges in thickness from 0 feet at the southern margin of the aguifer to as much as 9,000 feet in the north-central part of the aquifer. Ground-water recharge to the Uinta-Animas aquifer generally occurs in the areas of higher altitude along the margins of the basin. Ground water is discharged mainly to streams, springs, and by transpiration from yegetation growing along stream valleys. The rate of ground-water withdrawal is small, and natural discharge is approximately equal to recharge. Recharge occurs near the southern margin of the aquifer, and discharge occurs near the White and Green Rivers (from USGS publication HA 730-C). Water samples from Mesaverde sands in the nearby Natural Buttes Unit yielded highly saline water.

## Geologic Setting (TABLE 2.1)

The proposed enhanced oil recovery injection well is located in the Greater Monument Butte Field, T9S and R17E, which lies near the center of the broad, gently northward dipping south flank of the Uinta Basin. More than 450 million barrels of oil (63 MT) have been produced from sediments of the Uinta Basin. The Uinta Basin is a topographic and structural trough encompassing an area of more than 9300 square mi (14,900 km) in northeast Utah. The basin is sharply asymmetrical, with a steep north flank bounded by the east-west-trending Uinta Mountains, and a gently dipping south flank. The Uinta Basin was formed in Paleocene to Eocene time, creating a large area of internal drainage which was filled by the ancestral Lake Uinta. The lacustrine, or fresh water lake-formed, sediments deposited in and around Lake Uinta make up the Uintah and Green River Formations. The southern shore of Lake Uinta was very broad and flat, resulting in large cyclic shifts of the location of the shoreline during the many repeated transgressive and regressive cycles caused by the climatic and tectonic-induced rise and fall of water levels of the lake. Distributary-mouth bars, distributary channels, and near-shore bars are the primary oil producing sandstone reservoirs in the area. (Ref: "Reservoir Characterization of the Lower Green River Formation, Southwest Uinta Basin, Utah Biannual Technical Progress Report, 4/1/99-9/30/99", by C. D. Morgan, Program Manager, November 1999, Contract DE-AC26-98BC15103).

The Duchesne River Formation is absent in this area. Shale and siltstone of the Uinta Formation outcrop and compose the surface rock throughout the area. The lower 600 ft to 800 ft of the Uinta Formation, consisting generally of shale interbedded with occasionally water-bearing sandstone lenses between 5 ft to 20 ft thick, is underlain by the Green River Formation. The Green River Formation is further subdivided into several Member and local marker units. The cyclic nature of Green River deposition in the southern shore area resulted in numerous stacked, intertonguing deltaic and near-shore sand and silt deposits. Red alluvial shale and siltstone deposits that intertongue with the Green River sediments are of the Colton and Wasatch Formations. Under the

Wasatch Formation is the Mesaverde Formation, which consists primarily of continental-origin deposits of interbedded shale, sandstone, and coal.

The geologic dip is about 200'/mile, and there are no known surface faults in this area. Veins of gilsonite, a natural resinous hydrocarbon occasionally mined as a resource, occurs in the greater Uintah Basin though it is predominantly found on the eastern margin of the basin near the Colorado border. Vertical veins, generally between 2 ft to 6 ft wide but up to 28 ft wide, may extend many miles in length and occasionally extend as deep as 2,000 ft. In this area within the Greater Monument Butte Field there is one known gilsonite vein. This vein is not considered to present a pathway for migration of fluid out of the injection zone because it terminates at depth of about 2000 ft, far above the protective confining layer and much deeper injection zone. Newfield and the owner of this former gilsonite mine have agreed to conditions for operation near this vein to ensure no potential for impact to this vein or to ground water from enhanced oil recovery operations.

# TABLE 2.1 GEOLOGIC SETTING

Federal 9-11-9-17

Formation Name	Top (ft)	Base (ft)	TDS (mg/l)	Lithology
Uinta Formation	0	1,221		predominantly lenticular fluvial sand and shale with minor lacustrine carbonates
Upper Green River Formation	1,221	2,710		tight sandstone and interbedded shale forming confining layers between individual permeable lenticular sandstones
Green River: Trona	2,710	2,742		sodium carbonate
Mahogany Bench	2,742	3,438	-	oil shale
Green River: shale	3,438	3,527		shale
Green River: Garden Gulch	3,527	4,469		lacustrine sand, shale, carbonate, interbedded with fluvial sandstone
Green River: Douglas Creek	4,469	5,714	> 10,000	interbedded sand, shale, and limestone
Green River: Basal Carbonate	5,714	5,839		limestone

#### Proposed Injection Zone(s) (TABLE 2.2)

An injection zone is a geological formation, group of formations, or part of a formation that receives fluids through a well. The proposed injection zones are listed in TABLE 2.2.

Injection will occur into an injection zone that is separated from USDWs by a confining zone which is free of known open faults or fractures within the Area of Review.

# TABLE 2.2 INJECTION ZONES

Federal 9-11-9-17

Formation Name	Top (ft)	Base (ft)	TDS (mg/l)	Fracture Gradient (psi/ft)	Porosity	Exempted?*
Green River	3,527	5,839	16,217	0.700		N/A
* C - Currently Exempted E - Previously Exempted P - Proposed Exemption N/A - Not Applicable						

## Confining Zone(s) (TABLE 2.3)

A confining zone is a geological formation, part of a formation, or a group of formations that limits fluid movement above the injection zone. The confining zone or zones are listed in TABLE 2.3.

The State of Utah Division of Water Rights (http://nrwrt1.state.us), identifies no public water supply wells within the one-quarter (1/4) mile Area-of-Review (AOR) around the Federal 9-11-9-17 well.

Technical Publication No. 92; State of Utah, Department of Natural Resources, cites the base of Underground Sources of Drinking Water (USDW) in the Uinta Formation approximately 181 feet below the ground surface at this location. As there is no definitive data relative to the potential of the Uinta Formation to be a USDW below the depth of 181 feet, the EPA delineates the Uinta Formation to be a potential USDW to its base of 1,221 feet.

Throughout the Greater Monument Butte Field area undergoing enhanced oil recovery operations, water analyses of the Green River Formation generally exhibit total dissolved (TDS) content well in excess of 10,000 mg/l. However, some recent water analyses from the field showed lower TDS values closer to 10,000 mg/l. While rain and surface water recharge into Green River Formation outcrops further south along the Book Cliffs/Roan Cliffs in effect "freshens" the Green River Formation water near those outcrops, in this area of the Monument Butte Field the observed occasional "freshening" is ascribed to the effective dilution of the originally occurring high TDS water from injection of relatively fresh water for enhanced oil recovery operations. Water samples from deeper Mesaverde Formation sands in the nearby Natural Buttes Unit yield highly saline water.

# TABLE 2.3 CONFINING ZONES

Federal 9-11-9-17

Formation Name	Formation Lithology	Top (ft)	Base (ft)
Green River: shale	shale	3,438	3,527

## Underground Sources of Drinking Water (USDWs) (TABLE 2.4)

Aquifers or the portions thereof which contain less than 10,000 mg/l total dissolved solids (TDS) and are being or could in the future be used as a source of drinking water are considered to be USDWs. The USDWs in the area of this facility are identified in TABLE 2.4.

# TABLE 2.4 UNDERGROUND SOURCES OF DRINKING WATER (USDW) Federal 9-11-9-17

Formation Name	Formation Lithology	Top (ft)	Base (ft)	TDS (mg/l)	
Uinta Formation	predominantly lenticular fluvial sand and shale, with minor lacustrine carbonates	0 .	1,221	< 10,000	-

## PART III. Well Construction (40 CFR 146.22)

The Federal No. 9-11-9-17 was drilled to a total depth of 5,800 feet (KB) in the Basal Carbonate member of the Green River Formation.

Surface casing (8-5/8 inch) was set at a depth of 297 feet in a 12-1/4 inch hole using 150 sacks of Class "G" cement which was circulated to the surface.

Production casing (5-1/2 inch) was set at a depth of 5,792 feet (KB) in a 7-7/8 inch hole with 285 sacks of Premium Lite II and 375 sacks of 50/50 poz mix. The CBL shows the top of cement at 310 feet from the surface.

The schematic diagram shows the enhanced recovery injection perforations in the Douglas Creek Member of the Green River Formation. Additional perforations may be added at a later time between the depths of 3527 feet and the top of the Wasatch Formation (estimated to be 5,839 feet) provided the operator first notifies the Director and later submits an updated well completion report (EPA Form 7520-12) and schematic diagram.

i 1	STATE OF						
•	DEPARTMENT OF N DIVISION OF OIL				5. LEASE DESIGNATION AND USA UTU-075174	SERIAL NUMBER:	
SUNDRY	Y NOTICES AN	D REPOR	RTS ON	WELLS	6. IF INDIAN, ALLOTTEE OR	TRIBE NAME:	
Do not use this form for proposals to di wells, or to drill horizon	rill new wells, significantly deepen tal laterals. Use APPLICATION F				7. UNIT OF CA AGREEMENT I SUNDANCE UNIT	NAME:	
OIL WELL		OTHER		· •	8. WELL NAME and NUMBER FEDERAL 9-11-9-17	:	
2. NAME OF OPERATOR:					9. API NUMBER:		
NEWFIELD PRODUCTION COM	<u>APANY</u>				4304735158  10. FIELD AND POOL, OR WILDCAT:		
ADDRESS OF OPERATOR:  Route 3 Box 3630	CITY Myton ST	rate UT z	ZIP 84052	PHONE NUMBER 435.646.3721	MONUMENT BUTTE	LDCA1:	
4. LOCATION OF WELL: FOOTAGES AT SURFACE: 2038 FSL OTR/OTR, SECTION, TOWNSHIP, RANGE	720 FEL				COUNTY: UINTAH STATE: UT		
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☐ NOTICE OF INTENT	ACIDIZE	Ļ	DEEPEN		REPERFORATE CURRE		
(Submit in Duplicate)	ALTER CASING	l	FRACTURE T		SIDETRACK TO REPAI		
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	CHANGE TUBING	[	PLUG AND A	BANDON	VENT OR FLAIR		
X SUBSEQUENT REPORT	CHANGE WELL NAME	[	PLUG BACK		WATER DISPOSAL		
(Submit Original Form Only)	X CHANGE WELL STATUS	[	PRODUCTION	N (START/STOP)	WATER SHUT-OFF		
Date of Work Completion:	COMMINGLE PRODUCING	FORMATIONS [	RECLAMATI	ON OF WELL SITE	OTHER: - Injection Conv	ersion	
06/11/2008	X CONVERT WELL TYPE	[	RECOMPLET	E - DIFFERENT FORMATION			
12. DESCRIBE PROPOSED OR CO On 6/6/08 Margo Smith wi time to perform the test or loss. The well was not injunction available to witness the te EPA# UT21056-07130	ith the EPA was contacte in 6/19/08. On 6/19/08 the ecting during the test. The st.	ed concerning t e csg was pres	the initial MI ssured up to	Γ on the above listed 1130 psig and chart	well. Permission was ed for 30 minutes with ere was not an EPA report to the well and the well a	no pressure	
NAME (PLEASE PRINT) Callie Duncar	1			TITLE Production Clerk			
A			- <u> </u>	0.000.000			
SIGNATURE CULLE F	2038			DATE 06/25/2008			

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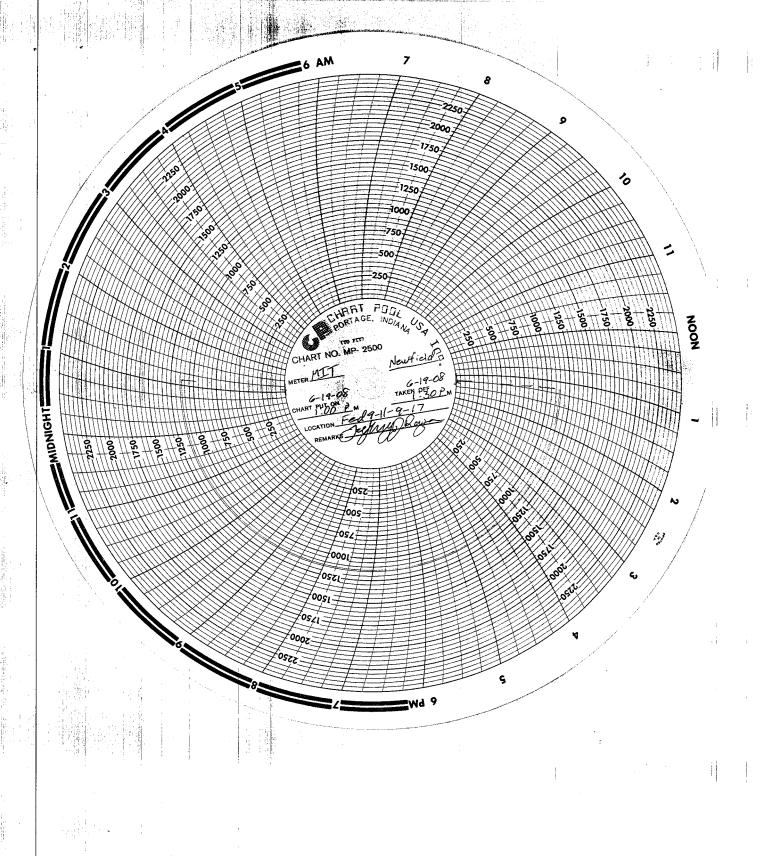
RECEIVED JUN 27 2008 DIV. OF OIL, GAS & MINING

# Mechanical Integrity Test Casing or Annulus Pressure Mechanical Integrity Test U.S. Environmental Protection Agency Underground Injection Control Program 999 18th Street, Suite 500 Denver, CO 80202-2466

EPA Witness:			Date: _	6/19	108	
Test conducted by: TVC	fley J.1	کری				
Others present:						
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Well Name: Fed 9-11	-9-17		Type: ER SW	D Statu	is: AC TA UC	
Field: Monument Location NELSE Sec	BUTTE		Elin C	11:00	Chand /	
Location/VE/SE Sec	: <u>                                     </u>	N & R.T.	YENW County	VIVIICU	2 State D 7	
Operator: New icl		imum Allow	able Pressure:		PSIG	
Last MIT:/		miuni Anow	able Flessule.		1010	
Is this a regularly schedule	d test?	Yes [\	⊿ No			
	[×					
Test after well rework?		Yes [≽	√ No			
Well injecting during test?		Yes 🗽	No If Yes	, rate:	bpo	d
		•				
Pre-test casing/tubing annulu	us pressure:		p	sig		
NATEDATA TADI E	Test #1		Test #2	·	Test #3	
MIT DATA TABLE TUBING	PRESSURE		1 test #2		Test no	
	TRESSURE	neia	T	neia		nsio
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Initial Pressure End of test pressure  CASING / TUBING  0 minutes 5 minutes 10 minutes 15 minutes 20 minutes 25 minutes 30 minutes	O	psig psig psig psig psig psig psig psig	PRESSURE	psig psig psig psig psig psig psig psig		psig psig psig psig psig psig psig

MECHANICAL INTEGRITY PRESSURE TEST

Additional comments for mechanical integrity pressure test, such as volume of fluid added to annulus and bled back at end of test, reason for failing test (casing head leak, tubing leak, other), etc.:



## FEDERAL 9-11-9-17 4/1/2008 To 8/30/2008

6/7/2008 Day: 1

Conversion

Basin #2 Swabbing on 6/6/2008 - MIRU Basin #2. Hot oiler pumped 60 BW down csg. Unseat rod pump. Flush rods w/ 25 BW. LD 10 rods. PU Polish rod. SIWFN.

6/10/2008 Day: 2

Conversion

Basin #2 Swabbing on 6/9/2008 - PU & TIH W/ rods. Seat pump, soft joint rod string & strip off flow-T. RU HO trk & fill tbg W/ 20 BW. Pressure test tbg to 3000 psi. Retrieve rod string & unseat pump. TOH and LD rod string and pump. Reflushed rods W/ 30 BW on TOH. ND wellhead. Found TA @ 5523' unset. NU BOP. TOH and talley production tbg. Broke every connection, clean & inspect pins and apply Liquid O-ring to pins. Out W/ 64 jts. Flushed tbg W/ add'l 25 BW.

6/11/2008 Day: 3

Conversion

Basin #2 Swabbing on 6/10/2008 - Con't TOH & talley tbg. Broke each connection, clean & inspect pins & apply Liquid O-ring to pins. Flushed tbg twice to clear wax from ID. LD btm 35 jts tbg and BHA. MU & TIH W/ injection string as follows: new Weatherford 5 1/2" Arrowset 1-X pkr (W/ W.L re-entry guide & hardened steeel slips), new SN and 138 jts 2 7/8 8rd 6.5# J-55 tbg. RU HO trk & pump 10 bbl pad. Drop standing valve & pump to SN. Pressure up on tbg to 3000 psi. Bump pressure several times & bleed air. Final test of 30 minutes good. Retrieve standing valve W/ overshot on sandline. SIFN.

6/12/2008 Day: 4

**Conversion** 

Basin #2 Swabbing on 6/11/2008 - ND BOP & land tbg on flange. Mix 15 gals Multi-Chem C-6031 & 5 gals B-8625 in 70 bbls fresh wtr. RU HO trk & pump dn annulus @ 90°F. PU on tbg & set pkr W/ SN @ 4487', CE @ 4491' & EOT @ 4495'. Land tbg W/ 16,000# tension. NU wellhead. Pressure test casing & pkr to 1400 psi. Held solid for 30 minutes. RDMOSU. Well ready for MIT.

6/23/2008 Day: 5

Conversion

Rigless on 6/22/2008 - On 6/6/08 Margo Smith with the EPA was contacted concerning the initial MIT on the above listed well (Fed 9-11-9-17). Permission was given at that time to perform the test on 6/19/08. On 6/19/08 the csg was pressured up to 1130 psig and charted for 30 minutes with no pressure loss. The well was not injecting during the test. The tbg pressure was 0 psig during the test. There was not an EPA representative available to witness the test. EPA# UT21056-07130 API# 43-047-35158



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 8

1595 Wynkoop Street
DENVER, CO 80202-1129
Phone 800-227-8917
http://www.epa.gov/region08

AUG 2 1 2008

Ref: 8P-W-GW

<u>CERTIFIED MAIL</u> RETURN RECEIPT REQUESTED RECEIVED
SEP 0 2 2008

DIV. OF OIL, GAS & MINING

Michael Guinn
District Manager
Newfield Production Company
Route 3 – Box 3630
Myton, UT 84052

RE: 180-Day Limited Authorization to Inject Federal 9-11-9-17 Well EPA Permit No. UT21056-07130 Uintah County, UT API #43-047-35158

Dear Mr. Guinn:

The Newfield Production Company (Newfield) letter with attached information was received by the Environmental Protection Agency (EPA), Region 8, on July 1, 2008. The submittal satisfactorily completed the **Prior to Commencing Injection** requirements for Final Class II Underground Injection Control Permit UT21056-07130, effective April 10, 2008. The Part I (Internal) Mechanical Integrity Test (MIT), Well Rework Record (EPA Form No. 7520-12), schematic diagram, and calculated pore pressure were reviewed and approved by EPA on August 11, 2008.

As of the date of this letter, Newfield is authorized to commence injection into Federal 9-11-9-17 at a maximum allowable injection pressure (MAIP) of 1,175 psig for a limited period of time.

Because the cement bond log submitted for this well did not show an adequate interval of 80% or greater bond index through the confining zone above the injection zone, Newfield is required to demonstrate Part II (External) Mechanical Integrity (Part II MI) within a 180-day period from the date that injection begins. Approved tests include temperature survey, noise log or oxygen activation log, and Region 8 may accept results of a Radioactive Tracer Survey. The Part II MIT shall be demonstrated at least once every five years. This 180-day period allows time for injection zone pressure to elevate prior to demonstrating Part II MI, which is necessary because it may be underpressured from previous oil production, and the Part II MI tests rely on elevated formation pressure.

Newfield must receive prior authorization from the Director in order to inject at pressures greater than the permitted MAIP during any test. Please note that the maximum pressure used during the Part II MI test may become the new MAIP because Part II MI was demonstrated at that pressure. Therefore, it may be advantageous to run a step rate test prior to conducting the Part II MI test. Should Newfield apply for an increase to the MAIP at a later date, the demonstration of Part II MI must also be conducted at that time.

Please remember that it is Newfield's responsibility to be aware of and to comply with all conditions of Permit UT21056-07130 for the Federal 9-11-9-17 injection well.

If you have questions regarding the above action, please call Margo Smith at 303-312-6318 or 1-800-227-8917, ext. 312-6318. Results from the Part II MI test should be mailed directly to the attention of Margo Smith, at the letterhead address citing **Mail Code:** 8P-W-GW very prominently.

Sincerely,

B

Stephen S. Tuber

Assistant Regional Administrator

Office of Partnerships and Regulatory Assistance

cc: Uintah & Ouray Business Committee, Ute Indian Tribe:

Curtis Cesspooch, Chairman
Irene Cuch, Vice-Chairwoman
Frances Poowegup, Councilwoman
Ronald Groves, Councilman
Phillip Chimburas, Councilman
Steven Cesspooch, Councilman

Daniel Picard, Superintendent Uintah & Ouray Indian Agency U.S. Bureau of Indian Affairs

Shaun Chapoose, Director Land Use Dept. Ute Indian Tribe

Elaine Willie, Gap Coordinator Ute Indian Tribe

Larry Love, Director Energy & Minerals Dept. Ute Undian Tribe Gilbert Hunt, Assistant Director State of Utah - Natural Resources

Fluid Minerals Engineering Department U.S. Bureau of Land Management Vernal, Utah

Eric Sundberg, Regulatory Analyst Newfield Exploration Company



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 8

1595 Wynkoop Street
DENVER, CO 80202-1129
Phone 800-227-8917
http://www.epa.gov/region08

SEP 3 0 2008

Ref: 8P-W-GW

## <u>CERTIFIED MAIL</u> RETURN RECEIPT REQUESTED

Eric Sundberg Regulatory Analyst Newfield Production Company 1401 Seventeenth Street, Suite 100 Denver, CO 80202

95 ITE 11

RE: Final Permit
Federal 9-11-9-17 Well
EPA Permit No. UT21056-07130
Uintah County, UT
API #43-047-35158

Dear Mr. Sundberg:

The Newfield Production Company (Newfield) permit was issued April 10, 2008. The copy of the permit that you received was inadvertently sent without the dates and signatures on Page 2. A replacement page is enclosed. We regret any inconvenience.

If you have any questions, please contact Mary Shaver of the EPA Region 8 Underground Injection Control Program at (303) 312-6329, or toll free at (800) 227-8917, ext. 312-6329.

Sincerely,

Steven J. Pratt, P.E., CAPM (inactive)

Director

Groundwater Program

Enclosure: Page 2 of Final Permit

Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY

RECEIVED

OCT 0 2 2008

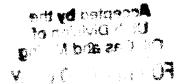
DIV. OF OIL, GAS & MINING

cc:

Gil Hunt Assistant Director Utah Division of Oil, Gas, and Mining

Fluid Minerals Engineering Office BLM - Vernal Office

Michael Guinn District Manager Newfield Production Company Myton, Utah



## Part I. AUTHORIZATION TO CONSTRUCT AND OPERATE

Under the authority of the Safe Drinking Water Act and Underground Injection Control (UIC) Program regulations of the U. S. Environmental Protection Agency (EPA) codified at Title 40 of the Code of Federal Regulations (40 CFR) Parts 2, 124, 144, 146, and 147, and according to the terms of this Permit,

Newfield Production Company 1401 Seventeenth Street, Suite 1000 Denver, CO 80202

is authorized to construct and to operate the following Class II injection well or wells:

Federal 9-11-9-17 2038' FSL & 720' FEL, NESE S11, T9S, R17E Uintah County, UT

EPA regulates the injection of fluids into injection wells so that injection does not endanger underground sources of drinking water (USDWs). EPA UIC Permit conditions are based on authorities set forth at 40 CFR Parts 144 and 146, and address potential impacts to USDWs.

Under 40 CFR Part 144, Subpart D, certain conditions apply to all UIC Permits and may be incorporated either expressly or by reference. General permit conditions for which the content is mandatory and not subject to site-specific differences are not discussed in this document. Issuance of this Permit does not convey any property rights of any sort or any exclusive privilege, nor does it authorize injury to persons or property or invasion of other private rights, or any infringement of other Federal, State or local laws or regulations. (40 CFR §144.35) An EPA UIC Permit may be issued for the operating life of the injection well or project unless terminated for reasonable cause under 40 CFR §§144.39, 144.40 and 144.41, and may be reviewed at least once every five (5) years to determine if action is required under 40 CFR §144.36(a).

This Permit is issued for the life of the well(s) unless modified, revoked and reissued, or terminated under 40 CFR 144.39 or 144.40. This EPA Permit may be adopted, modified, revoked and reissued, or terminated if primary enforcement authority for a UIC Program is delegated to an Indian Tribe or State. Upon the effective date of delegation, reports, notifications, questions and other correspondence should be directed to the Indian Tribe or State Director.

Issue Date:

APR 10 2008

Effective Date

APR 10 2008

Stephen S. Tuber

Assistant Regional Administrator\*

Office of Partnerships and Regulatory Assistance

\*NOTE: The person holding this title is referred to as the "Director" throughout this Permit.

FINAL PERCECT

RECEIVED mit OCT 0 2 2008

#### STATE OF UTAH

	Accepte Utah Di Oil, Gas a FOR REC				
12. DESCRIBE PROPOSED OR C The above reference well	•	-	-	s including dates, depths,	volumes, etc.
	COMMINGLE PRODUCING  X CONVERT WELL TYPE	NG FORMATIONS	=	ION OF WELL SITE TE - DIFFERENT FORMATION	X OTHER: - Change status, put well on injection
(Submit Original Form Only)  Date of Work Completion:	CHANGE WELL STATUS		_	N (START/STOP)	WATER SHUT-OFF
☐ SUBSEQUENT REPORT	CHANGE TUBING  CHANGE WELL NAME		PLUG AND A		VENT OR FLAIR  WATER DISPOSAL
09/30/2008	CHANGE TO PREVIOUS	PLANS	OPERATOR O		TUBING REPAIR
Approximate date work will	CASING REPAIR		NEW CONST		TEMPORARITLY ABANDON
(Submit in Duplicate)	ALTER CASING		FRACTURE	TREAT	SIDETRACK TO REPAIR WELL
X NOTICE OF INTENT	ACIDIZE		DEEPEN		REPERFORATE CURRENT FORMATION
TYPE OF SUBMISSION			TY	PE OF ACTION	
11. CHECK APPRO	PRIATE BOXES TO	O INDICAT	E NATURE (	OF NOTICE, REP	ORT, OR OTHER DATA
OTR/OTR. SECTION. TOWNSHIP. RANG	E. MERIDIAN: NESE, 11, T9	S. R17E			STATE: UT
FOOTAGES AT SURFACE: 2038 FSL	. 720 FEL				COUNTY: UINTAH
Route 3 Box 3630 4. LOCATION OF WELL:	CITY Myton	STATE UT	ZIP 84052	435.646.3721	MONUMENT BUTTE
3. ADDRESS OF OPERATOR:	<b>&gt; f</b>		04050	PHONE NUMBER	10. FIELD AND POOL, OR WILDCAT:
NEWFIELD PRODUCTION CO	MPANY				4304735158
2. NAME OF OPERATOR:	GAS WELL	OTHER	···		FEDERAL 9-11-9-17 9. API NUMBER:
1. TYPE OF WELL: OIL WELL	8. WELL NAME and NUMBER:				
Do not use this form for proposals to o	drill new wells, significantly deep ntal laterals. Use APPLICATIO				7. UNIT OF CA AGREEMENT NAME: SUNDANCE UNIT
SUNDR	Y NOTICES A	ND REPO	ORTS ON	WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
	DIVISION OF O	IL, GAS AN	D MINING		USA UTU-075174
	DIVIDIONIAN		T		<ol><li>LEASE DESIGNATION AND SERIAL NUMBER:</li></ol>

(This space for State use only)

RECEIVED

OCT 0 6 2008

DIV. OF OIL, GAS & MINING

FORM 3160-5 (August 2007)

#### **UNITED STATES** DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB No. 1004-0137 Expires: July 31,2010

5. Lease Serial No. USA UTU-075174
USA UTU-075174

**SUNDRY NOTICES AND REPORTS ON WELLS** Do not use this form for proposals to drill or to re-enter an

6. If Indian, Allottee or Tribe Name.

aballuolleu w	en. Ose Form 5160-5 (A	APD) for such proposals	•		
SUBMIT IN	TRIPLICATE - Other	Instructions on page 2		7. If Unit or CA/A SUNDANCE U	greement, Name and/or
2. Name of Operator	Other		· .	8. Well Name and FEDERAL 9-11-	No.
NEWFIELD PRODUCTION Co 3a. Address Route 3 Box 3630 Myton, UT 84052	OMPANY	3b. Phone <i>(include are</i> 435.646.3721	code)	9. API Well No. 4304735158 10. Field and Pool	, or Exploratory Area
4. Location of Well (Footage, 2038 FSL 720 FEL NESE Section 11 T9S R17E	Sec., T., R., M., or Survey Desc	cription)		MONUMENT B 11. County or Pari UINTAH, UT	UTTE
12. CHECI	X APPROPRIATE BOX	(ES) TO INIDICATE NA	TURE OF		HER DATA
TYPE OF SUBMISSION		TYPI	E OF ACTION	ON	
Notice of Intent  Subsequent Report  ■	Acidize Alter Casing Casing Repair Change Plans	Deepen Fracture Treat New Construction Plug & Abandon	Reclar	ction (Start/Resume) mation nplete orarily Abandon	Water Shut-Off Well Integrity Other Step Rate Test
Final Abandonment	Convert to Injector	Plug Back		Disposal	

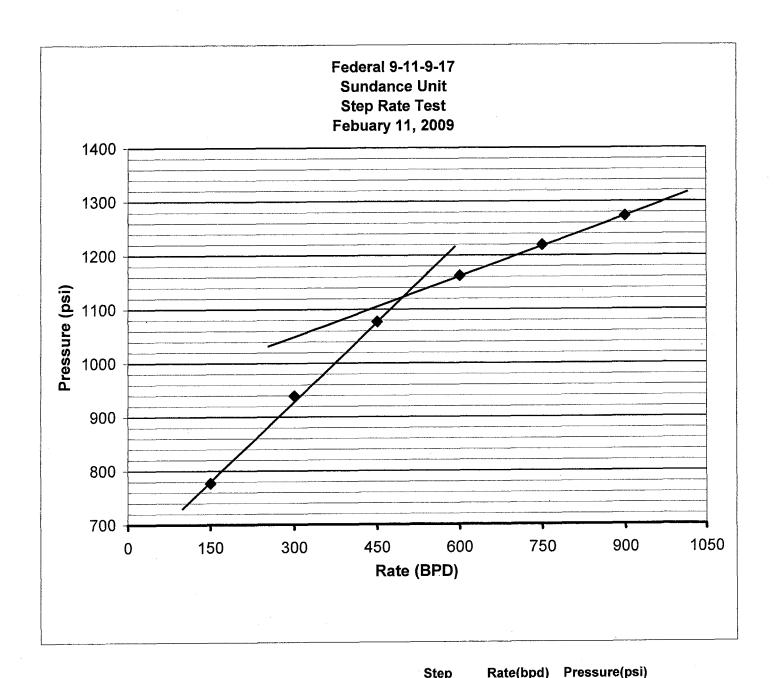
13. Describe Proposed or Completed Operation: (Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final

A step rate test was conducted on the subject well on February 11, 2009. Results from the test indicate that the fracture gradient is .687 psi/ft. Therefore, Newfield is requesting that the maximum allowable injection pressure (MAIP) be changed to 1120 psi.

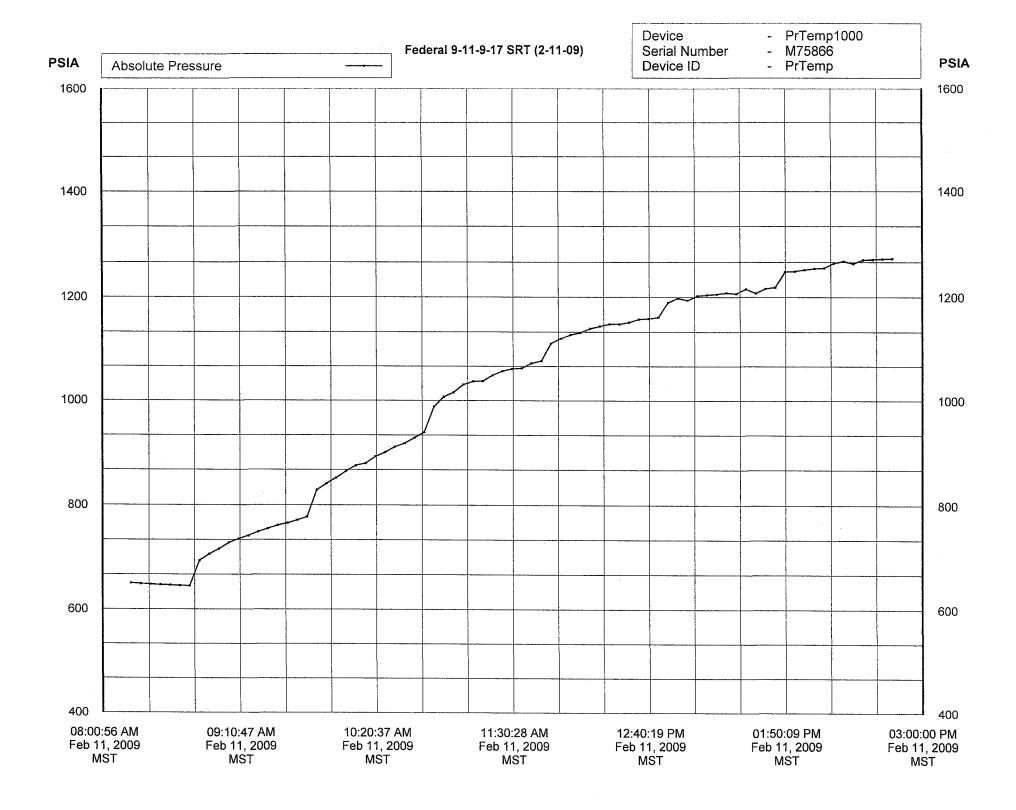
> Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY

I hereby certify that the foregoing is true and correct (Printed/ Typed)	Title		
Chevenne Bateman	Well Analyst Foreman		
Signature What	Date 02/18/2009		
THIS SPACE FOR FED	DERAL OR STATE OFFIC	CE USE	
Approved by	Title	Date	
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office		

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious and fraudulent statements or representations as to any matter within its jurisdiction



		- ctob		
Start Pressure:	644 psi <b>"</b>	1	150	777
Instantaneous Shut In Pressure (ISIP):	1184 psi	2	300	939
Top Perforation:	4528 feet	3	450	1077
Fracture pressure (Pfp):	1120 psi	4	600	1162
FG:	0.687 psi/ft	5	750	1219
1 G.		6	900	1273
		_		



Report Name: Report Date: File Name: PrTemp1000 Data Table Feb 11, 2009 05:33:04 PM MST

S:\Welinfo\PTC® Instruments 2.00\Federal 9-11-9-17 SRT (2-11-9-17).csv Federal 9-11-9-17 SRT (2-11-09)
PrTemp1000 - Temperature and Pressure Recorder

REV2C (64K) M75866

PrTemp Feb 11, 2009 08:14:58 AM MST Feb 11, 2009 02:45:00 PM MST Device ID: Data Start Date: Data End Date:

1 Minute

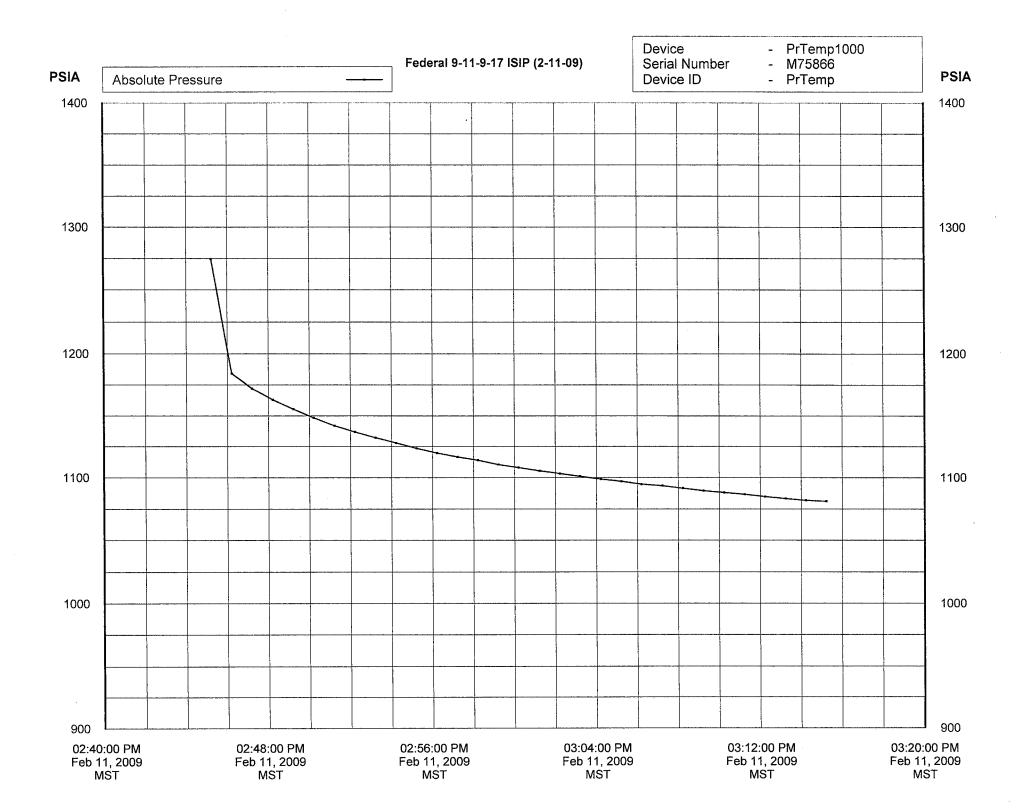
Reading Rate: Readings: 1 to 79 of 79 May 21, 2008 May 21, 2009 Last Calibration Date: Next Calibration Date:

Title: Device:

Hardware Revision: Serial Number:

iext Calibration	i bate.	Way 21, 2000	
Reading	Date and Time (MST)	Absolute Pressure	<u>Annotation</u>
1	Feb 11, 2009 08:14:58 AM	649.800 PSIA	
2	Feb 11, 2009 08:19:58 AM	648.600 PSIA	
3	Feb 11, 2009 08:24:59 AM	647.600 PSIA	
4	Feb 11, 2009 08:29:59 AM	646.600 PSIA	
5	Feb 11, 2009 08:34:58 AM	646.000 PSIA	
6	Feb 11, 2009 08:39:58 AM	645.200 PSIA	
7	Feb 11, 2009 08:44:59 AM	644.400 PSIA	
8	Feb 11, 2009 08:49:58 AM	693.600 PSIA	
9	Feb 11, 2009 08:54:59 AM	706.000 PSIA	
10	Feb 11, 2009 08:59:59 AM	716.000 PSIA	
11	Feb 11, 2009 09:04:59 AM	728.000 PSIA	
12	Feb 11, 2009 09:09:58 AM	735.200 PSIA	
13	Feb 11, 2009 09:14:58 AM	741.400 PSIA 748.600 PSIA	
14 15	Feb 11, 2009 09:19:58 AM Feb 11, 2009 09:24:58 AM	755.000 PSIA	
15 16	Feb 11, 2009 09:29:59 AM	761.200 PSIA	
17	Feb 11, 2009 09:34:58 AM	765.200 PSIA	
18	Feb 11, 2009 09:39:59 AM	771.000 PSIA	
19	Feb 11, 2009 09:44:58 AM	777.400 PSIA	
20	Feb 11, 2009 09:49:58 AM	828.200 PSIA	
21	Feb 11, 2009 09:54:59 AM	840.200 PSIA	
22	Feb 11, 2009 09:59:58 AM	850.800 PSIA	
23	Feb 11, 2009 10:04:58 AM	863.800 PSIA	
24	Feb 11, 2009 10:09:58 AM	874.600 PSIA	
25	Feb 11, 2009 10:15:04 AM	878.600 PSIA	
26	Feb 11, 2009 10:19:58 AM	891.600 PSIA	
27	Feb 11, 2009 10:24:59 AM	900.000 PSIA	
28	Feb 11, 2009 10:29:59 AM	910.200 PSIA	
29	Feb 11, 2009 10:34:58 AM	917.200 PSIA	
30	Feb 11, 2009 10:39:59 AM	928.000 PSIA	
31	Feb 11, 2009 10:44:58 AM	938.600 PSIA	
32	Feb 11, 2009 10:49:58 AM	988.400 PSIA 1007.000 PSIA	
33	Feb 11, 2009 10:54:59 AM	1007.000 PSIA 1015.400 PSIA	
34	Feb 11, 2009 10:59:59 AM Feb 11, 2009 11:04:58 AM	1030.600 PSIA	
35 36	Feb 11, 2009 11:09:59 AM	1037.000 PSIA	
37	Feb 11, 2009 11:14:58 AM	1037.600 PSIA	
38	Feb 11, 2009 11:19:58 AM	1048.800 PSIA	
39	Feb 11, 2009 11:24:58 AM	1057.000 PSIA	
40	Feb 11, 2009 11:29:58 AM	1061.600 PSIA	
41	Feb 11, 2009 11:34:58 AM	1063.000 PSIA	
42	Feb 11, 2009 11:39:58 AM	1072.400 PSIA	
43	Feb 11, 2009 11:44:59 AM	1076.800 PSIA	
44	Feb 11, 2009 11:49:58 AM	1111.000 PSIA	
45	Feb 11, 2009 11:54:59 AM	1120.400 PSIA	
46	Feb 11, 2009 11:59:58 AM	1128.000 PSIA	
47	Feb 11, 2009 12:04:58 PM	1132.000 PSIA	
48	Feb 11, 2009 12:09:58 PM	1140.000 PSIA	
49	Feb 11, 2009 12:14:58 PM	1144.200 PSIA	
50	Feb 11, 2009 12:19:58 PM	1148.600 PSIA	
51 52	Feb 11, 2009 12:24:58 PM	1148.600 PSIA 1151.800 PSIA	
52 53	Feb 11, 2009 12:29:59 PM Feb 11, 2009 12:34:58 PM	1157.800 PSIA	
53 54	Feb 11, 2009 12:39:59 PM	1158.800 PSIA	
5 <del>5</del>	Feb 11, 2009 12:44:58 PM	1161.600 PSIA	
56	Feb 11, 2009 12:49:58 PM	1189.800 PSIA	
57	Feb 11, 2009 12:54:59 PM	1198.400 PSIA	
58	Feb 11, 2009 12:59:58 PM	1194.000 PSIA	
59	Feb 11, 2009 01:04:58 PM	1202.400 PSIA	
60	Feb 11, 2009 01:09:58 PM	1204.200 PSIA	

61	Feb 11, 2009 01:14:59 PM	1205.600 PSIA
62	Feb 11, 2009 01:19:58 PM	1208.200 PSIA
63	Feb 11, 2009 01:24:59 PM	1206.600 PSIA
64	Feb 11, 2009 01:29:59 PM	1215.200 PSIA
65	Feb 11, 2009 01:34:58 PM	1207.600 PSIA
66	Feb 11, 2009 01:39:59 PM	1216.400 PSIA
67	Feb 11, 2009 01:44:58 PM	1219.000 PSIA
68	Feb 11, 2009 01:49:58 PM	1248.600 PSIA
69	Feb 11, 2009 01:54:58 PM	1249.400 PSIA
70	Feb 11, 2009 01:59:59 PM	1252.400 PSIA
71	Feb 11, 2009 02:04:58 PM	1254.800 PSIA
72	Feb 11, 2009 02:10:00 PM	1255.800 PSIA
73	Feb 11, 2009 02:14:58 PM	1264.800 PSIA
74	Feb 11, 2009 02:19:58 PM	1268.200 PSIA
75	Feb 11, 2009 02:24:58 PM	1264.000 PSIA
76	Feb 11, 2009 02:29:58 PM	1270.600 PSIA
77	Feb 11, 2009 02:34:58 PM	1271.400 PSIA
78	Feb 11, 2009 02:39:58 PM	1272.400 PSIA
79	Feb 11, 2009 02:45:00 PM	1273.200 PSIA



Report Name: Report Date: PrTemp1000 Data Table Feb 11, 2009 05:32:54 PM MST File Name:

S:\Welinfo\PTC® Instruments 2.00\Federal 9-11-9-17 ISIP (2-11-9-17).csv

Federal 9-11-9-17 ISIP (2-11-09)

1081.200 PSIA

PrTemp1000 - Temperature and Pressure Recorder Device: REV2C (64K) Hardware Revision:

Serial Number: M75866 Device ID: PrTemp Feb 11, 2009 02:45:13 PM MST Feb 11, 2009 03:15:13 PM MST Data Start Date:

Data End Date: 1 Minute Reading Rate: Readings:

Title:

1 to 31 of 31 Last Calibration Date: May 21, 2008 Next Calibration Date: May 21, 2009

Feb 11, 2009 03:15:13 PM

31

ext Calibratio	n Date.	Way 21, 2000	
Reading	Date and Time (MST)	Absolute Pressure	Annotation
1	Feb 11, 2009 02:45:13 PM	1274.600 PSIA	
2	Feb 11, 2009 02:46:13 PM	1184.000 PSIA	
3	Feb 11, 2009 02:47:12 PM	1172.000 PSIA	
4	Feb 11, 2009 02:48:13 PM	1162.800 PSIA	
. 5	Feb 11, 2009 02:49:13 PM	1155.200 PSIA	
6	Feb 11, 2009 02:50:12 PM	1148.400 PSIA	
7	Feb 11, 2009 02:51:13 PM	1142.000 PSIA	
8	Feb 11, 2009 02:52:13 PM	1137.000 PSIA	
9	Feb 11, 2009 02:53:13 PM	1132.200 PSIA	
10	Feb 11, 2009 02:54:13 PM	1128.000 PSIA	
11	Feb 11, 2009 02:55:13 PM	1123.600 PSIA	
12	Feb 11, 2009 02:56:13 PM	1119.800 PSIA	
13	Feb 11, 2009 02:57:13 PM	1116.600 PSIA	
14	Feb 11, 2009 02:58:13 PM	1114.000 PSIA	
15	Feb 11, 2009 02:59:13 PM	1110.400 PSIA	
16	Feb 11, 2009 03:00:12 PM	1108.000 PSIA	
17	Feb 11, 2009 03:01:13 PM	1105.400 PSIA	
.18	Feb 11, 2009 03:02:13 PM	1103.200 PSIA	*
19	Feb 11, 2009 03:03:12 PM	1101.000 PSIA	
20	Feb 11, 2009 03:04:13 PM	1098.800 PSIA	
21	Feb 11, 2009 03:05:13 PM	1097.000 PSIA	
22	Feb 11, 2009 03:06:12 PM	1094.800 PSIA	
23	Feb 11, 2009 03:07:13 PM	1093.600 PSIA	
24	Feb 11, 2009 03:08:13 PM	1091.600 PSIA	
25	Feb 11, 2009 03:09:13 PM	1089.600 PSIA	
26	Feb 11, 2009 03:10:14 PM	1088.200 PSIA	
27	Feb 11, 2009 03:11:14 PM	1086.800 PSIA	
28	Feb 11, 2009 03:12:14 PM	1085.000 PSIA	
29	Feb 11, 2009 03:13:14 PM	1083.400 PSIA	
,30	Feb 11, 2009 03:14:13 PM	1082.000 PSIA	

## Federal 9-11-9-17 Rate Sheet (2-11-09)

Step # 1	Time:	8:50	8:55	9:00	9:05	9:10	9:15
Step # 1	Rate:	150.3	150.3	150.3	150.3	150.3	150.3
		·					
	Time:	9:20	9:25	9:30	9:35	9:40	9:45
	Rate:	150.3	150.2	150.2	150.2	150.2	150.2
C, #0	Time:	9:50	9:55	10:00	10:05	10:10	10:15
Step # 2	Rate:	300.5	300.5	300.5	300.5	300.4	300.4
	<u> </u>						
	Time:	10:20	10:25	10:30	10:35	10:40	10:45
	Rate:	300.3	300.3	300.3	300.3	300.2	300.2
					<u></u>		
a. #0	Time:	10:50	10:55	11:00	11:05	11:10	11:15
Step # 3	Rate:	450.6	450.6	450.5	450.5	450.5	450.4
	Time:	11:20	11:25	11:30	11:35	11:40	11:45
	Rate:	450.4	450.4	450.3	450.3	450.3	450.3
		· · · · · · · · · · · · · · · · · · ·					
a " 1	Time:	11:50	11:55	12:00	12:05	12:10	12:15
Step # 4	Rate:	600.5	600.5	600.5	600.4	600.4	600.4
	Time:	12:20	12:25	12:30	12:35	12:40	12:45
	Rate:	600.4	600.3	600.3	600.3	600.3	600.2
	Time:	12:50	12:55	1:00	1:05	1:10	1:15
Step # 5	Rate:	750.4	750.4	750.4	750.4	750.4	750.3
	Time:	1:20	1:25	1:30	1:35	1:40	1:45
	Rate:	750.3	750.3	750.3	750.2	750.1	750
o "o	Time:	1:50	1:55	2:00	2:05	2:10	2:15
Step # 6	Rate:	900.7	900.7	900.6	900.6	900.6	900.5
	L					<del></del>	
	Time:	2:20	2:25	2:30	2:35	2:40	2:45
	Rate:	900.5	900.4	900.4	900.4	900.3	900.3
	<u> </u>				·		
							·
						_	
	<u></u>						
							, <u> </u>
					·		



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 8

1595 Wynkoop Street
Denver, CO 80202-1129
Phone 800-227-8917
http://www.epa.gov/region08

MAR 1 1 2009

Ref: 8P-W-GW

## CERTIFIED MAIL RETURN RECEIPT REQUESTED

Michael Guinn District Manager Newfield Production Company Route 3-Box 3630 Myton, UT 84502 Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY

9S 17E 11

RE: Underground Injection Control (UIC)

Minor Permit Modification No. 1 and
Authorization to Continue Injection

EPA UIC Permit UT21056-07130

Well: Federal 9-11-9-17

Uintah County, Utah

API # 43-047-35158

Dear Mr. Guinn:

The Environmental Protection Agency (EPA) received the results from the February 11, 2009 Step Rate Test (SRT) on the Federal 9-11-9-17 well. The test concluded the fracture gradient to be 0.687 psi/ft. Therefore, the maximum allowable injection pressure (MAIP) is decreased to 1,120 psig, from the 1,175 psig specified in the Final Permit.

EPA also received the results of the February 20, 2009 Radioactive Tracer Survey (RTS) for the Federal 9-11-9-17 well. EPA has determined that the test adequately demonstrated that injected fluids will remain in the authorized interval at the MAIP of 1,120 psig. The results of the RTS were reviewed and approved by EPA on March 4, 2009.

As of the date of this letter, the EPA hereby authorizes injection into the Federal 9-11-9-17 well under the terms and conditions of EPA UIC Permit UT21056-07130 at an MAIP of 1,120 psig.

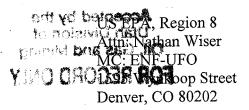
You may apply for a higher maximum allowable injection pressure at a later date. Your application should be accompanied by the interpreted results from a Step-Rate Test (SRT) that measures the formation fracture pressure and the fracture gradient at this location. A current copy of EPA Guidelines for running and interpreting a SRT will be sent upon request. Should the SRT result in approval of a higher maximum allowable injection pressure, a new process.

MAR 17 2009

DIV. OF OIL, GAS & MINING,

demonstration must be run to show that the injected fluids will remain in the authorized injection interval at the higher pressure.

As of this approval, responsibility for Permit Compliance and Enforcement is transferred to Region 8 UIC Technical Enforcement Program office. Therefore, please direct all future notification, reporting, monitoring and compliance correspondence to the following address, referencing your well name and UIC Permit number on all correspondence regarding this well:



For questions regarding notification, testing, monitoring, reporting or other Permit requirements, Nathan Wiser of the UIC Technical Enforcement Program may be reached by calling 800-227-8917 (ext. 312-6211). Please be reminded that it is your responsibility to be aware of and to comply with all conditions of your Permit.

If you have any questions regarding this approval, please call Sarah Bahrman at 800-227-8917 (ext. 312-6243).

Sincerely,

Shr

Eddie A. Sierra

Acting Assistant Regional Administrator Office of Partnerships and Regulatory Assistance

cc:

Uintah & Ouray Business Committee: Curtis Cesspooch, Chairman Ronald Groves, Councilman Irene Cuch, Vice-Chairwoman Steven Cesspooch, Councilman Phillip Chimburas, Councilman Frances Poowegup, Councilwoman

Daniel Picard BIA - Uintah & Ouray Indian Agency Ferron Secakuku Director, Natural Resources Ute Indian Tribe

Larry Love Director of Energy & Minerals Dept. Ute Indian Tribe

Gil Hunt Associate Director Utah Division of Oil, Gas, and Mining

Fluid Minerals Engineering Office BLM - Vernal Office

Eric Sundberg Regulatory Analyst Newfield Production Company Sundry Number: 38081 API Well Number: 43047351580000

	STATE OF UTAH		FORM 9
I	DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MININ		5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-075174
SUNDR	RY NOTICES AND REPORTS O	N WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
	posals to drill new wells, significantly de reenter plugged wells, or to drill horizonta n for such proposals.		7.UNIT or CA AGREEMENT NAME: GMBU (GRRV)
1. TYPE OF WELL Water Injection Well			8. WELL NAME and NUMBER: FEDERAL 9-11-9-17
2. NAME OF OPERATOR: NEWFIELD PRODUCTION CO	DMPANY		9. API NUMBER: 43047351580000
3. ADDRESS OF OPERATOR: Rt 3 Box 3630 , Myton, UT		HONE NUMBER:	9. FIELD and POOL or WILDCAT: 8 MILE FLAT NORTH
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2038 FSL 0720 FEL			COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSH Qtr/Qtr: NESE Section: 1	HP, RANGE, MERIDIAN: 1 Township: 09.0S Range: 17.0E Meridian	: S	STATE: UTAH
11. CHEC	K APPROPRIATE BOXES TO INDICATE	NATURE OF NOTICE, REPOR	RT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
	ACIDIZE	ALTER CASING	CASING REPAIR
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME
Approximate date work will start.	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	FRACTURE TREAT	NEW CONSTRUCTION
5/18/2013	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK
SPUD REPORT Date of Spud:	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	LI TEMPORARY ABANDON
DRILLING REPORT	TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL
Report Date:	WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION
	■ WILDCAT WELL DETERMINATION	OTHER	OTHER: 5 YR MIT
5 YR MIT perform casing was pressur no pressure loss pressure was 9	completed operations. Clearly show all med on the above listed well. ed up to 1250 psig and chartes. The well was injecting durin 933 psig during the test. There vailable to witness the test. EF	On 05/18/2013 the ed for 30 minutes with g the test. The tbg was not an EPA	Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY May 23, 2013
NAME (PLEASE PRINT) Lucy Chavez-Naupoto	<b>PHONE NUMBER</b> 435 646-4874	TITLE Water Services Technician	
SIGNATURE N/A		DATE 5/20/2013	

Sundry Number: 38081 API Well Number: 43047351580000

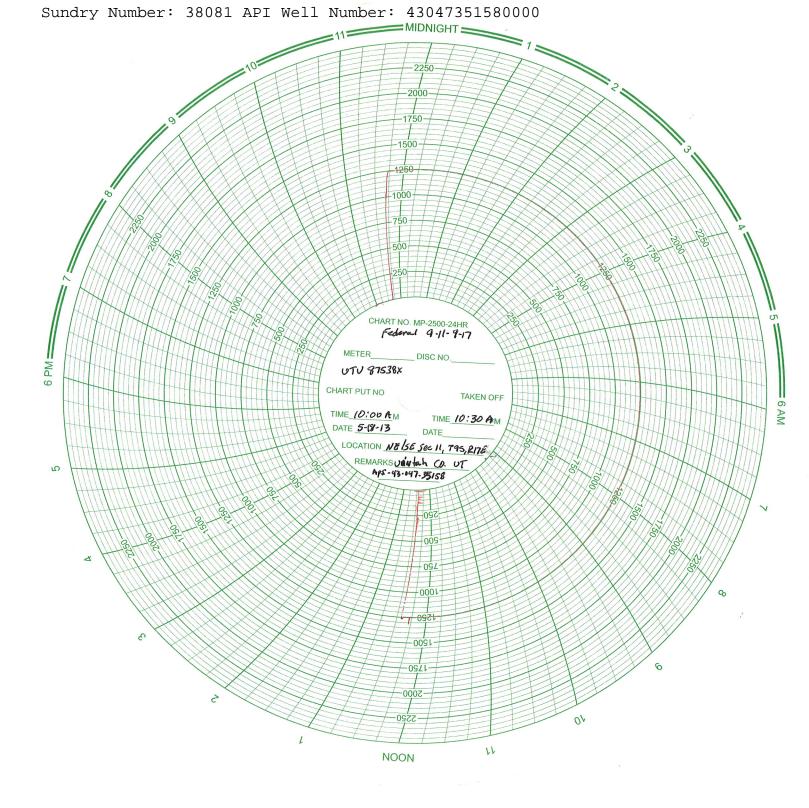
# Mechanical Integrity Test Casing or Annulus Pressure Mechanical Integrity Test U.S. Environmental Protection Agency Underground Injection Control Program 999 18th Street, Suite 500 Denver, CO 80202-2466

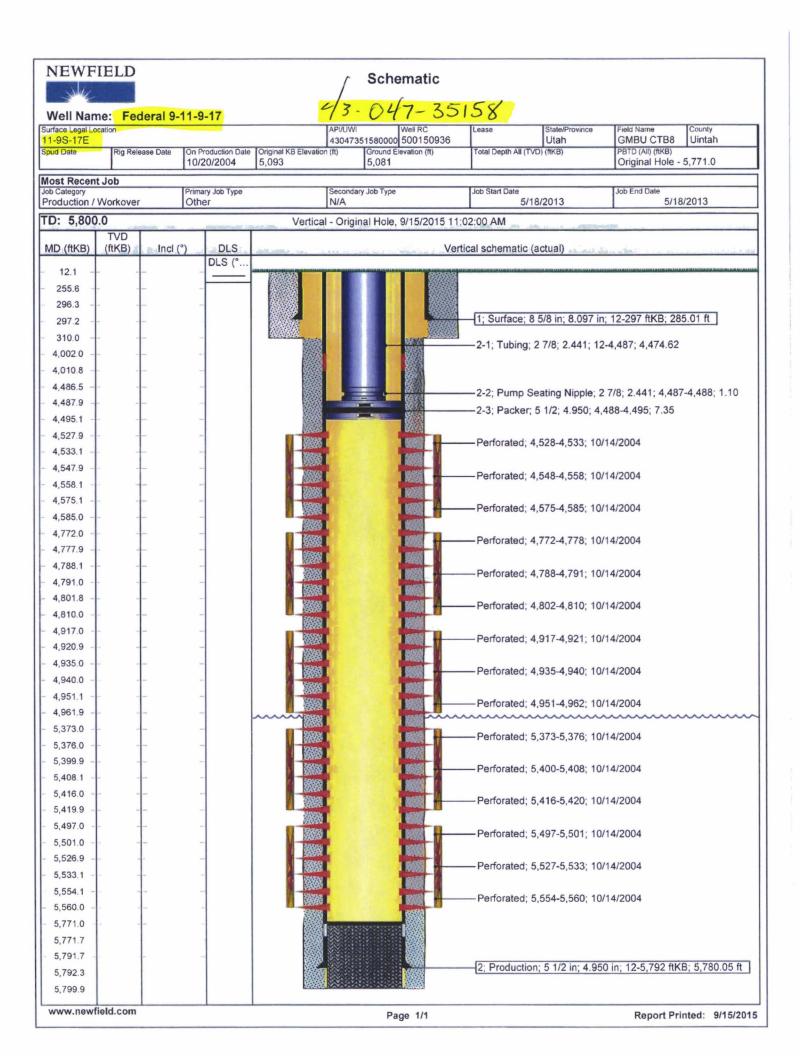
EPA Witness:				ate: <u>5 / 18</u>		130
Well Name: Federal 9-1 Field: MBT F Location: NE/SE Sec: Operator: Brenden Cu Last MIT:/	11 T 9 N	(S) R_17	<b>(</b> E)/W (	SWD Statu County: <u>Vintah</u> ure: <u>1175</u>	State: UT	_
Is this a regularly scheduled Initial test for permit? Test after well rework? Well injecting during test? Pre-test casing/tubing annulus		120	No No No	If Yes, rate:/	<b>5</b> b	pd
MIT DATA TABLE	Test #1		Test #	2	Test #	3
TUBING	PRESSURE				ı	
Initial Pressure	933	psig		psig		psig
End of test pressure	933	psig		psig		psig
CASING / TUBING	ANNULUS		PRES	SURE		
0 minutes	1250	psig		psig		psig
5 minutes	1250	psig		psig		psig
10 minutes	1250	psig		psig		psig
15 minutes	1250	psig		psig		psig
20 minutes	1250	psig		psig		psig
25 minutes		psig		psig		psig
30 minutes	1250	psig		psig		psig
minutes	1630	psig	1	psig		psig
minutes		psig	-	psig		psig
		[ ]Fail	1 1 1	Pass [ ]Fail	[ ] Pass	[ ]Fail
RESULT	I A I ASS	Livan				

[ / ] No Does the annulus pressure build back up after the test? [ ] Yes MECHANICAL INTEGRITY PRESSURE TEST

Additional comments for mechanical integrity pressure test, such as volume of fluid added to annulus and bled back at end of test, reason for failing test (casing head leak, tubing leak, other), etc.:

Signature of Witness:	







## Newfield Wellbore Diagram Data Federal 9-11-9-17

urface Legal Location 1-9S-17E					43047351580000		Lease	
County		State/Province Utah			Basin		Field Name GMBU CTB8	
Vell Start Date		Spud Date			Final Rig Release Date	W. C.	On Production Date	
8/3/2004  Original KB Elevation (ft) Ground Elev	ation (ft)	Total Depth (ftK8	3)		Total Depth All (TVD) (ftKB	3)	10/20/2004 PBTD (All) (ftKB)	
5,093	5,081	AT ALE THE PROPERTY.		5,800.0		W. SVICELES	Original Hole - 5,771.0	
Casing Strings  Csg Des		Run Da	to I	OD (in)	ID (in)	Wt/Len (lb/ft)	Grade	Set Depth (ftKB)
Surface	.11	8/3/2004	10	8 5/8	8.097	24.00	J-55	29
roduction		9/28/2004		5 1/2	4.950	15.50	J-55	5,79
ement		=)					A CONTRACTOR OF THE PARTY OF TH	
tring: Surface, 297ftKB 8/6	/2004	har v	man d				. the filling	
ementing Company  J Services Company					Top Depth (ftKB) 12.0	Bottom Depth (ftKB) 310.0	Full Return?	Vol Cement Ret (bbl)
uid Description		HANNIH BERNANDA BANKAN			Fluid Type	Amount (sacks)	Class	Estimated Top (ftKB)
2% CaCL2 + 1/4#/sk Cello-Flake mixed					Lead	150	[G	12
tring: Production, 5,792ftK ementing Company	5 3/20/200	<b>J4</b>			Top Depth (ftKB)	Bottom Depth (ftK8)	Full Return?	Vol Cement Ret (bbl)
BJ Services Company					310.0 Fluid Type	5,800.0 Amount (sacks)	Olean	Estimated Top (ftKB)
uid Description					Lead		Class Premlite II	310
luid Description					Fluid Type Tail	Amount (sacks)	Class 50/50 poz	Estimated Top (ftKB) 2,500
ubing Strings					Tall	1 575	30/30 poz	2,500
ubing Description ubing					Run Date	2008	Set Depth (ftK8)	4,495
Item Des	Jts	OD (in)	1D (in)	Wt (lb/ft)	Grade	Len (ft)	Top (ftKB)	Btm (ftKB)
ubing	138	2 7/8	2.441	6.50	J-55	4,474.62	12.0	4,486
ump Seating Nippte	1	2 7/8	2.441			1.10	4,486.6	4,487
acker	1	5 1/2	4.950			7.35	4,487.7	4,495
tod Strings od Description					Run Date		Set Depth (ftKB)	
Item Des	Jts	OD (in	1	VVt (lb/ft)	Grade	Len (ft)	Top (ffKB)	Btm (ftKB)
								I
Perforation Intervals								L
Stage# Zone		Top (ftK		Btm (ftKB)	Shot Dens (shots/ft)	Phasing (°)	Nom Hole Dia (in)	Date
Stage# Zone 5 D2, Original Hole		Top (ftK	4,528	4,533	Shot Dens (shots/ft) 4 4	Phasing (*)	Nom Hole Dia (in)	10/14/2004
Stage# Zone 5 D2, Original Hole 5 D2, Original Hole		Top (ftK	4,528 4,548	4,533 4,558		Phasing (*)	Nom Hole Dia (in)	10/14/2004 10/14/2004
Stage# Zone 5 D2, Original Hole 5 D2, Original Hole 5 D3, Original Hole		Top (flK	4,528 4,548 4,575	4,533 4,558 4,585		Phasing (*)	Nom Hole Dia (in)	10/14/2004
Stage# Zone 5 D2, Original Hole 5 D2, Original Hole 5 D3, Original Hole		Top (ffK	4,528 4,548	4,533 4,558		Phasing (*)	Nom Hole Dia (in)	10/14/2004 10/14/2004 10/14/2004
Stage# Zone 5 D2, Original Hole 5 D2, Original Hole 5 D3, Original Hole 4 B2, Original Hole		Top (flK	4,528 4,548 4,575 4,772	4,533 4,558 4,585 4,778		Phasing (*)	Nom Hole Dia (in)	10/14/2004 10/14/2004 10/14/2004 10/14/2004
Stage# Zone 5 D2, Original Hole 5 D2, Original Hole 5 D3, Original Hole 4 B2, Original Hole 4 B2, Original Hole		Τορ (πκ	4,528 4,548 4,575 4,772 4,788	4,533 4,558 4,585 4,778 4,791		Phasing (*)	Nom Hole Dia (in)	10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004
Stage#         Zone           5         D2, Original Hole           5         D2, Original Hole           5         D3, Original Hole           4         B2, Original Hole           4         B2, Original Hole           4         B2, Original Hole		Top (ffK	4,528 4,548 4,575 4,772 4,788 4,802	4,533 4,558 4,585 4,778 4,791 4,810	4 4 4 4 4	Phasing (*)	Nom Hole Dia (in)	10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004
Stage# Zone 5 D2, Original Hole 5 D2, Original Hole 5 D3, Original Hole 4 B2, Original Hole 4 B2, Original Hole 4 B2, Original Hole 4 B2, Original Hole 3 A1, Original Hole 3 A3, Original Hole 3 A3, Original Hole		Top (ffK	4,528 4,548 4,575 4,772 4,788 4,802 4,917	4,533 4,558 4,585 4,778 4,791 4,810 4,921	4 4 4 4 4 4	Phasing (*)	Nom Hole Dia (in)	10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004
Stage#   Zone     5   D2, Original Hole     5   D2, Original Hole     5   D3, Original Hole     4   B2, Original Hole     4   B2, Original Hole     4   B2, Original Hole     5   A1, Original Hole     6   A1, Original Hole     7   A1, Original Hole		Top (ffK	4,528 4,548 4,575 4,772 4,788 4,802 4,917 4,935	4,533 4,558 4,585 4,778 4,791 4,810 4,921 4,940	4 4 4 4 4 4 4	Phasing (*)	Nom Hole Dia (in)	10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004
Stage# Zone 5 D2, Original Hole 5 D2, Original Hole 5 D3, Original Hole 4 B2, Original Hole 4 B2, Original Hole 4 B2, Original Hole 5 B2, Original Hole 6 A1, Original Hole 7 A1, Original Hole 8 A3, Original Hole		Top (flk.	4,528 4,548 4,575 4,772 4,788 4,802 4,917 4,935 4,951	4,533 4,558 4,585 4,778 4,791 4,810 4,921 4,940 4,962	4 4 4 4 4 4 4 4	Phasing (*)	Nom Hole Dia (in)	10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004
Stage#   Zone     5   D2, Original Hole     5   D2, Original Hole     5   D3, Original Hole     6   B2, Original Hole     4   B2, Original Hole     4   B2, Original Hole     5   A1, Original Hole     6   A1, Original Hole     7   A3, Original Hole     6   CP1, Original Hole     7   CP1, Original Hole     8   Original Hole     9   Original Hole     1   Original Hole     1   Original Hole     2   CP1, Original Hole     1   Original Hole     2   Original Hole     1   Original Hole     1   Original Hole     2   Original Hole     1   Original Hole		Top (flK	4,528 4,548 4,575 4,772 4,788 4,802 4,917 4,935 4,951 5,373	4,533 4,558 4,585 4,778 4,791 4,810 4,921 4,940 4,962 5,376	4 4 4 4 4 4 4 4	Phasing (*)	Nom Hole Dia (in)	10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004
Stage#   Zone     5   D2, Original Hole     5   D2, Original Hole     5   D3, Original Hole     6   B2, Original Hole     4   B2, Original Hole     4   B2, Original Hole     3   A1, Original Hole     3   A3, Original Hole     4   CP1, Original Hole     5   CP2, Original Hole     6   CP2, Original Hole     7   CP2, Original Hole     8   CP2, Original Hole     9   CP2, Original Hole     1   CP3,		Top (flK	4,528 4,548 4,575 4,772 4,788 4,802 4,917 4,935 4,951 5,373 5,400	4,533 4,558 4,585 4,778 4,791 4,810 4,921 4,940 4,962 5,376 5,408	4 4 4 4 4 4 4 4	Phasing (*)	Nom Hole Dia (in)	10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004
Stage# Zone 5 D2, Original Hole 5 D2, Original Hole 5 D3, Original Hole 4 B2, Original Hole 4 B2, Original Hole 4 B2, Original Hole 3 A1, Original Hole 3 A3, Original Hole 4 CP1, Original Hole 5 CP2, Original Hole 6 CP2, Original Hole 7 CP2, Original Hole 7 CP2, Original Hole		Top (flK	4,528 4,548 4,575 4,772 4,788 4,802 4,917 4,935 4,951 5,373 5,400 5,416	4,533 4,558 4,585 4,778 4,791 4,810 4,921 4,940 4,962 5,376 5,408 5,420	4 4 4 4 4 4 4 4	Phasing (*)	Nom Hole Dia (in)	10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004
Stage# Zone 5 D2, Original Hole 5 D2, Original Hole 5 D3, Original Hole 6 B2, Original Hole 8 A1, Original Hole A3 A2, Original Hole CP1, Original Hole CP2, Original Hole CP2, Original Hole CP4, Original Hole		Top (flK	4,528 4,548 4,575 4,772 4,788 4,802 4,917 4,935 4,951 5,373 5,400 5,416 5,497	4,533 4,558 4,585 4,778 4,791 4,810 4,921 4,940 4,962 5,376 5,408 5,420 5,501	4 4 4 4 4 4 4 4 4 4	Phasing (*)	Nom Hole Dia (in)	10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004
Stage#   Zone     5   D2, Original Hole     5   D2, Original Hole     5   D3, Original Hole     6   D3, Original Hole     8   B2, Original Hole     8   B2, Original Hole     8   B2, Original Hole     3   A1, Original Hole     3   A3, Original Hole     4   CP1, Original Hole     5   CP2, Original Hole     6   CP2, Original Hole     7   CP4, Original Hole     8   CP4, Original Hole     9   CP4, Original Hole     1   CP4, Original Hole     2   CP4, Original Hole     3   CP4, Original Hole     4   CP4, Original Hole     5   CP4, Original Hole     6   CP4, Original Hole     7   CP4, Original Hole     8   CP4, Original Hole     9   CP4, Original Hole     9   CP4, Original Hole     1   CP4, Original Hole     2   CP4, Original Hole     3   CP4, Original Hole     4   CP4, Original Hole     5   CP4, Original Hole     6   CP4, Original Hole     7   CP4, Original Hole     8   CP4, Original Hole     9   CP4, O			4,528 4,548 4,575 4,772 4,788 4,802 4,917 4,935 4,951 5,373 5,400 5,416 5,497 5,527 5,554	4,533 4,558 4,585 4,778 4,791 4,810 4,921 4,940 4,962 5,376 5,408 5,420 5,501 5,533 5,560	4 4 4 4 4 4 4 4 4 4 4			10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004
Stage#   Zone     5	(psi) 1 500	Top (ffK.	4,528 4,548 4,575 4,772 4,788 4,802 4,917 4,935 4,951 5,373 5,400 5,416 5,497 5,527 5,554	4,533 4,558 4,585 4,778 4,791 4,810 4,921 4,940 4,962 5,376 5,408 5,420 5,501 5,533 5,560	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Phasing (*)  Total Clean Vol (bbl)	Nom Hole Dia (in)  Total Sturry Vol (bbl)	10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004
Stage#   Zone     5   D2, Original Hole     5   D2, Original Hole     5   D3, Original Hole     6   B2, Original Hole     4   B2, Original Hole     4   B2, Original Hole     3   A1, Original Hole     3   A3, Original Hole     4   CP1, Original Hole     5   CP2, Original Hole     6   CP4, Original Hole     7   CP4, Original Hole     8   CP4, Original Hole     9   CP4, Original Hole     1   CP4, Original Hole     2   CP4, Original Hole     3   CP4, Original Hole     4   CP4, Original Hole     5   CP4, Original Hole     6   CP4, Original Hole     7   CP4, Original Hole     8   CP4, Original Hole     9   CP4, Original Hole     9   CP4, Original Hole     9   CP4, Original Hole     1   CP4, Original Hole     2   CP5, Original Hole     3   CP4, Original Hole     4   CP4, Original Hole     5   CP5, Original Hole     6   CP6, Original Hole     7   CP6, Original Hole     8   CP6, Original Hole     9   CP6, Original Hole     9   CP7,	1,500		4,528 4,548 4,575 4,772 4,788 4,802 4,917 4,935 4,951 5,373 5,400 5,416 5,497 5,527 5,554	4,533 4,558 4,585 4,778 4,791 4,810 4,921 4,940 4,962 5,376 5,408 5,420 5,501 5,533 5,560	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4			10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004
Stage#   Zone     5   D2, Original Hole     5   D2, Original Hole     5   D3, Original Hole     6   B2, Original Hole     4   B2, Original Hole     4   B2, Original Hole     3   A1, Original Hole     3   A3, Original Hole     4   CP1, Original Hole     5   CP2, Original Hole     6   CP4, Original Hole     7   CP4, Original Hole     8   CP4, Original Hole     9   CP4, Original Hole     1   CP4, Original Hole     2   CP4, Original Hole     3   CP4, Original Hole     4   CP4, Original Hole     5   CP4, Original Hole     6   CP4, Original Hole     7   CP4, Original Hole     8   CP4, Original Hole     9   CP4, Original Hole     9   CP4, Original Hole     9   CP4, Original Hole     1   CP4, Original Hole     2   CP5, Original Hole     3   CP4, Original Hole     4   CP4, Original Hole     5   CP5, Original Hole     6   CP6, Original Hole     7   CP6, Original Hole     8   CP6, Original Hole     9   CP6, Original Hole     9   CP7,	(psi) 1,500 1,500 2,100		4,528 4,548 4,575 4,772 4,788 4,802 4,917 4,935 4,951 5,373 5,400 5,416 5,497 5,527 5,554	4,533 4,558 4,585 4,778 4,791 4,810 4,921 4,940 4,962 5,376 5,408 5,420 5,501 5,533 5,560	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4			10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004
Stage#   Zone     5   D2, Original Hole     5   D2, Original Hole     5   D3, Original Hole     6   B2, Original Hole     4   B2, Original Hole     4   B2, Original Hole     3   A1, Original Hole     3   A3, Original Hole     4   CP1, Original Hole     5   CP2, Original Hole     6   CP4, Original Hole     7   CP4, Original Hole     8   CP4, Original Hole     9   CP4, Original Hole     1   CP4, Original Hole     2   CP4, Original Hole     3   CP4, Original Hole     4   CP4, Original Hole     5   CP4, Original Hole     6   CP4, Original Hole     7   CP4, Original Hole     8   CP4, Original Hole     9   CP4, Original Hole     9   CP4, Original Hole     9   CP4, Original Hole     1   CP4, Original Hole     2   CP5, Original Hole     3   CP4, Original Hole     4   CP4, Original Hole     5   CP5, Original Hole     6   CP6, Original Hole     7   CP6, Original Hole     8   CP6, Original Hole     9   CP6, Original Hole     9   CP7,	1,500 1,500		4,528 4,548 4,575 4,772 4,788 4,802 4,917 4,935 4,951 5,373 5,400 5,416 5,497 5,527 5,554 t (psi/ft) 0.71 0.71	4,533 4,558 4,585 4,778 4,791 4,810 4,921 4,940 4,962 5,376 5,408 5,420 5,501 5,533 5,560 Max Rate (bbl/min) 24.8 25.1	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4			10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004
Stage# Zone  5 D2, Original Hole 5 D2, Original Hole 5 D3, Original Hole 4 B2, Original Hole 4 B2, Original Hole 4 B2, Original Hole 3 A1, Original Hole 3 A1, Original Hole 2 CP1, Original Hole 2 CP2, Original Hole 2 CP2, Original Hole 1 CP4, Original Hole 1 CP5, Original Hole 1 CP6, Original Hole	1,500 1,500 2,100		4,528 4,548 4,575 4,772 4,788 4,802 4,917 4,935 4,951 5,373 5,400 5,416 5,497 5,527 5,554	4,533 4,558 4,585 4,778 4,791 4,810 4,921 4,940 4,962 5,376 5,408 5,420 5,501 5,533 5,560 Max Rate (bbl/min) 24.8 25.1 24.8	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 1,557 1,484 1,594			10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004
5 D2, Original Hole 5 D2, Original Hole 5 D3, Original Hole 5 D3, Original Hole 6 D3, Original Hole 8 B2, Original Hole 8 B2, Original Hole 8 B2, Original Hole 3 A1, Original Hole 3 A3, Original Hole CP1, Original Hole CP2, Original Hole CP4, Original Hole CP5, Original Hole CP6, Original Hole CP7, Original Hole Simulations & Treatments Stage# ISIF	1,500 1,500 2,100 2,100 2,000		4,528 4,548 4,575 4,772 4,788 4,802 4,917 4,935 4,951 5,373 5,400 5,416 5,497 5,527 5,554 (ps)/ft) 0.71 0.86 0.87	4,533 4,558 4,585 4,778 4,791 4,810 4,921 4,940 4,962 5,376 5,408 5,420 5,501 5,533 5,560 Max Rale (bbl/min) 24.8 25.1 24.8 24.9	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 1,557 1,484 1,594 1,943			10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004
Stage#   Zone     5	1,500 1,500 2,100 2,100	Frac Gradien	4,528 4,548 4,575 4,772 4,788 4,802 4,917 4,935 4,951 5,373 5,400 5,416 5,497 5,527 5,554 tr(psi/ft) 0.71 0.86 0.87 0.87	4,533 4,558 4,585 4,778 4,791 4,810 4,921 4,940 4,962 5,376 5,408 5,420 5,501 5,533 5,560 Max Rate (bbl/min) 24.8 24.9 24.9	Max PSI (psi)  1,557 1,484 1,594 1,943 2,173			10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004
Stage#   Zone     5	1,500 1,500 2,100 2,100 2,000		4,528 4,548 4,575 4,772 4,788 4,802 4,917 4,935 4,951 5,373 5,400 5,416 5,497 5,527 5,554 t(psl/ft) 0.71 0.86 0.87 0.87	4,533 4,558 4,585 4,778 4,791 4,810 4,921 4,940 4,962 5,376 5,408 5,420 5,501 5,533 5,560  Max Rate (bbl/min) 24.8 25.1 24.8 24.9 24.9	Max PSI (psi)  1,557 1,484 1,594 1,943 2,173	Total Clean Vol (bbl)		10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004 10/14/2004



## Newfield Wellbore Diagram Data Federal 9-11-9-17

roppant						
Stage#	Total Prop Vol Pumped (lb)		Total Add Amount			
		Proppant Sand 43898 lb				
	10770	Proppant Sand 59568 lb				
		Proppant Sand 103302 lb				

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